

Received 10/07/16

# Equivalent Selfie Fractions: Dottable, Addable and Subtractable

Inder J. Taneja<sup>1</sup>

## Abstract

A **addable fraction** is a proper fraction where addition signs can be inserted into numerator and denominator, and the resulting fraction is equal to the original. The same is true for subtractable fractions, i.e., instead of additions we have subtraction. In this work we have written **symmetric equivalent fractions** having both the operations, i.e., one side is addition and another side is subtraction written in symmetric way. The work is for different digits, i.e., there is no repetition of digits in the same fraction. Also, the numerator less than denominator.

## 1 Introduction

Kieth [3, 4] for the first gave an idea of *dottable fraction*. It is a proper fraction where multiplication signs can be inserted into numerator and denominator, and the resulting fraction is equal to the original. Keith [3, 4] idea was only with multiplication. For the first time, we extended it to other operations also, such as with *addition*, *multiplication*, *potentiation*, etc. We can think all of them together also. See below some examples in each case:

- **Addable Fractions**

$$\frac{96}{352} = \frac{9+6}{3+52}, \quad \frac{182}{6734} = \frac{18+2}{6+734}, \text{ etc.} \quad (1)$$

- **Subtractable Fractions**

$$\frac{204}{357} = \frac{20-4}{35-7}, \quad \frac{726}{1089} = \frac{72-6}{108-9}, \text{ etc.} \quad (2)$$

- **Dottable Fraction**

$$\frac{13}{624} = \frac{1 \times 3}{6 \times 24}, \quad \frac{416}{728} = \frac{4 \times 16}{7 \times 2 \times 8}, \text{ etc.} \quad (3)$$

- **Dottable with Potentiation Fractions**

$$\frac{95}{342} = \frac{9 \times 5}{3^4 \times 2}, \quad \frac{728}{1456} = \frac{7^2 \times 8}{14 \times 56}, \text{ etc.} \quad (4)$$

- **Mixed Fractions: All Operations**

$$\frac{4980}{5312} = \frac{4-9+80}{5 \times (3+1)^2}, \quad \frac{3249}{5168} = \frac{(3+2^4) \times 9}{(5-1) \times 68}, \text{ etc.} \quad (5)$$

Observing the examples given in (1)-(5), the numerator and denominator follows the same order of digits in both sides of each fraction separated by operations. These type of fractions, we call *Selfie fractions*. There are two situations. One when all digits appearing in each fraction are distinct, and second, when there are repetitions of digits. Initially, we shall work with distinct digits. Due to big number of fractions, later we shall work with repetitions. The idea of *equivalent selfie fractions* is explained in following section.

---

<sup>1</sup>Formerly, Professor of Mathematics, Universidade Federal de Santa Catarina, 88.040-900 Florianópolis, SC, Brazil. E-mail: [ijtaneja@gmail.com](mailto:ijtaneja@gmail.com).

## 2 Equivalent Selfie Fractions

Above we have given *selfie fractions* with single value in each case. There are many fractions, that can be written in more than one way, for example,

- **Equivalent: Addable Fractions**

$$\frac{1453}{2906} = \frac{1 + 453}{2 + 906} = \frac{145 + 3}{290 + 6} = \frac{1 + 45 + 3}{2 + 90 + 6}. \quad (6)$$

- **Equivalent: Subtractable**

$$\frac{932}{1864} = \frac{9 - 32}{18 - 64} = \frac{93 - 2}{186 - 4}. \quad (7)$$

- **Equivalent: Dottable and Addable**

$$\frac{1680}{59472} = \frac{1 \times 6 \times 80}{59 \times 4 \times 72} = \frac{1 + 6 + 8 + 0}{59 + 472}. \quad (8)$$

- **Equivalent: Dottable, Addable and Subtractable**

$$\frac{302}{8154} = \frac{30 \times 2}{81 \times 5 \times 4} = \frac{3 + 02}{81 + 54} = \frac{3 - 02}{81 - 54}. \quad (9)$$

- **Symmetric Equivalent: Addable and Subtractable**

$$\frac{645}{1290} = \frac{6 - 45}{12 - 90} = \frac{6 + 45}{12 + 90}. \quad (10)$$

- **Equivalent: Dottable and Addable together**

$$\frac{284}{639} = \frac{2 \times 8 + 4}{6 + 39} = \frac{28 + 4}{6 \times (3 + 9)}. \quad (11)$$

- **Equivalent: Mixed – All Operations**

$$\frac{73842}{90516} = \frac{7 - 3 \times (8 - 4^2)}{9 \times 05 - 1 - 6} = \frac{7 \times (3 + 8) + 4^2}{90 + (5 - 1) \times 6} = \frac{738 + 4 + 2}{905 + 1 + 6}. \quad (12)$$

Equivalent expression given in equation (8), let us classify it as *symmetric equivalent fraction*. In this case we just change plus with minus and vice-versa. There are many fractions *double symmetric equivalent fraction* too. In this paper, we shall work with ***equivalent fractions*** given in equations (6)–(10). The study of equivalent fractions given in equations (11) and (12) shall be dealt elsewhere. The whole work on *Selfie Fractions* is divided in different papers given as follows:

1. Selfie Fractions: Addable – Equation (1) – [28];
2. Selfie Fractions: Dottable and Pontentiable – [29];
3. Selfie Fractions: Addable and Dottable Together – [30];
4. Equivalent Selfie Fractions: Dottable, Addable and Subtractable – this work ;
5. Equivalent Selfie Fractions: Addable and Dottable Together – [31].

This work is divided in sections and subsections as follows:

- 3 Equivalent Fractions: Dottable with Addable and Subtractable;
- 3.1 Dottable and Addable;
- 3.2 Dottable with Addable and Subtractable;
- 3.3 Dottable with Addable and Subtractable: Double Representations;
- 4 Symmetric Equivalent Selfie Fractions;
- 4.1 Double Representations;
- 4.2 Single Representation;
- 5 Symmetric Equivalent Fractions: Denominator with Six Digits ;
- 6 Subtractable Fraction;
- 7 More Subtraction Signs.

The study on numbers in different situations, refer author's work [7]-[27]. For other studies see also [1, 2, 5, 6].

### 3 Equivalent Fractions: Dottable with Addable and Subtractable

In the previous sections we have selfie fractions in two operations. In this section, we shall give *selfie fractions* where each representation is in different operations: *multiplication*, *addition* and *subtraction*. Not all the *selfie fractions* are in three different operations. Some of them are just having *multiplications* and *additions* operations.

#### 3.1 Dottable and Addable

- $\frac{235}{1974} = \frac{2 \times 3 \times 5}{1 \times 9 \times 7 \times 4} = \frac{2+3+5}{1+9+74}.$
- $\frac{1473}{9820} = \frac{14 \times 7 \times 3}{98 \times 20} = \frac{1+4+7+3}{98+2+0}.$
- $\frac{328}{1640} = \frac{3 \times 2 \times 8}{1 \times 6 \times 40} = \frac{3+2+8}{1+64+0}.$
- $\frac{1564}{7820} = \frac{1 \times 56 \times 4}{7 \times 8 \times 20} = \frac{1+5+6+4}{78+2+0}.$
- $\frac{329}{1645} = \frac{3 \times 2 \times 9}{1 \times 6 \times 45} = \frac{3+2+9}{1+64+5}.$
- $\frac{1635}{8720} = \frac{1 \times 6 \times 35}{8 \times 7 \times 20} = \frac{1+6+3+5}{8+72+0}.$
- $\frac{369}{1845} = \frac{3 \times 6 \times 9}{18 \times 45} = \frac{3+6+9}{1+84+5}.$
- $\frac{1908}{5724} = \frac{19 \times 08}{57 \times 2 \times 4} = \frac{19+08}{5+72+4}.$
- $\frac{615}{4920} = \frac{6 \times 15}{4 \times 9 \times 20} = \frac{6+1+5}{4+92+0}.$
- $\frac{2807}{5614} = \frac{2 \times 8 \times 07}{56 \times 1 \times 4} = \frac{28+07}{5+61+4}.$
- $\frac{4516}{9032} = \frac{45 \times 1 \times 6}{90 \times 3 \times 2} = \frac{4+51+6}{90+32}.$
- $\frac{4518}{9036} = \frac{45 \times 18}{90 \times 3 \times 6} = \frac{4+51+8}{90+36}.$
- $\frac{1096}{3425} = \frac{1 \times 096}{3 \times 4 \times 25} = \frac{1+09+6}{3+42+5}.$
- $\frac{1680}{59472} = \frac{1 \times 6 \times 80}{59 \times 4 \times 72} = \frac{1+6+8+0}{59+472}.$
- $\frac{1456}{2730} = \frac{1 \times 4 \times 56}{2 \times 7 \times 30} = \frac{1+4+5+6}{27+3+0}.$
- $\frac{1680}{94752} = \frac{1 \times 6 \times 80}{9 \times 4 \times 752} = \frac{1+6+8+0}{94+752}.$
- $\frac{1456}{7280} = \frac{1 \times 4 \times 56}{7 \times 2 \times 80} = \frac{1+4+5+6}{72+8+0}.$
- $\frac{1746}{39285} = \frac{1 \times 7 \times 4 \times 6}{3 \times 9 \times 28 \times 5} = \frac{1+7+4+6}{392+8+5}.$

- $\frac{2594}{10376} = \frac{2 \times 5 \times 94}{10 \times 376} = \frac{2 + 5 + 9 + 4}{1 + 03 + 76}.$
- $\frac{2596}{10384} = \frac{2 \times 5 \times 96}{10 \times 384} = \frac{2 + 5 + 9 + 6}{1 + 03 + 84}.$
- $\frac{3297}{16485} = \frac{3 \times 2 \times 97}{1 \times 6 \times 485} = \frac{3 + 2 + 9 + 7}{16 + 4 + 85}.$
- $\frac{3654}{18270} = \frac{3 \times 6 \times 54}{18 \times 270} = \frac{3 + 6 + 5 + 4}{1 + 82 + 7 + 0}.$
- $\frac{4516}{23709} = \frac{45 \times 16}{2 \times 3 \times 70 \times 9} = \frac{4 + 5 + 1 + 6}{2 + 3 + 70 + 9}.$
- $\frac{4635}{27810} = \frac{4 \times 6 \times 3 \times 5}{27 \times 8 \times 10} = \frac{4 + 6 + 3 + 5}{27 + 81 + 0}.$
- $\frac{5436}{27180} = \frac{54 \times 3 \times 6}{27 \times 180} = \frac{5 + 4 + 3 + 6}{2 + 7 + 1 + 80}.$
- $\frac{6083}{91245} = \frac{6 \times 08 \times 3}{9 \times 12 \times 4 \times 5} = \frac{6 + 08 + 3}{9 + 1 + 245}.$
- $\frac{7836}{21549} = \frac{7 \times 8 \times 3 \times 6}{2 \times 154 \times 9} = \frac{7 + 83 + 6}{215 + 49}.$
- $\frac{12980}{74635} = \frac{1 \times 2 \times 980}{7 \times 46 \times 35} = \frac{1 + 2 + 9 + 8 + 0}{74 + 6 + 35}.$
- $\frac{17460}{39285} = \frac{1 \times 7 \times 4 \times 60}{3 \times 9 \times 28 \times 5} = \frac{174 + 6 + 0}{392 + 8 + 5}.$
- $\frac{19602}{45738} = \frac{19 \times 60 \times 2}{4 \times 5 \times 7 \times 38} = \frac{19 + 6 + 02}{45 + 7 + 3 + 8}.$
- $\frac{30168}{52794} = \frac{30 \times 1 \times 6 \times 8}{5 \times 2 \times 7 \times 9 \times 4} = \frac{3 + 01 + 68}{5 + 27 + 94}.$
- $\frac{18074}{63259} = \frac{18 \times 074}{6 \times 3 \times 259} = \frac{1 + 8 + 07 + 4}{6 + 3 + 2 + 59}$   
 $= \frac{1 + 80 + 7 + 4}{63 + 259}.$
- $\frac{74108}{92635} = \frac{7 \times 4 \times 108}{9 \times 2 \times 6 \times 35} = \frac{7 + 41 + 08}{9 + 26 + 35}$   
 $= \frac{7 + 4 + 1 + 08}{9 + 2 + 6 + 3 + 5}.$

### 3.2 Dottable with Addable and Subtractable

- $\frac{81}{243} = \frac{8 \times 1}{2 \times 4 \times 3} = \frac{8 + 1}{24 + 3} = \frac{8 - 1}{24 - 3}.$
- $\frac{83}{249} = \frac{8 \times 3}{2 \times 4 \times 9} = \frac{8 + 3}{24 + 9} = \frac{8 - 3}{24 - 9}.$
- $\frac{108}{324} = \frac{1 \times 08}{3 \times 2 \times 4} = \frac{1 + 08}{3 + 24} = \frac{1 - 08}{3 - 24}.$
- $\frac{164}{287} = \frac{1 \times 64}{2 \times 8 \times 7} = \frac{16 + 4}{28 + 7} = \frac{16 - 4}{28 - 7}.$
- $\frac{164}{328} = \frac{1 \times 6 \times 4}{3 \times 2 \times 8} = \frac{16 + 4}{32 + 8} = \frac{16 - 4}{32 - 8}.$
- $\frac{182}{364} = \frac{18 \times 2}{3 \times 6 \times 4} = \frac{18 + 2}{36 + 4} = \frac{18 - 2}{36 - 4}.$
- $\frac{182}{637} = \frac{18 \times 2}{6 \times 3 \times 7} = \frac{18 + 2}{63 + 7} = \frac{18 - 2}{63 - 7}.$
- $\frac{183}{427} = \frac{1 \times 8 \times 3}{4 \times 2 \times 7} = \frac{18 + 3}{42 + 7} = \frac{18 - 3}{42 - 7}.$
- $\frac{218}{436} = \frac{2 \times 18}{4 \times 3 \times 6} = \frac{2 + 18}{4 + 36} = \frac{2 - 18}{4 - 36}.$
- $\frac{218}{763} = \frac{2 \times 18}{7 \times 6 \times 3} = \frac{2 + 18}{7 + 63} = \frac{2 - 18}{7 - 63}.$
- $\frac{308}{924} = \frac{3 \times 08}{9 \times 2 \times 4} = \frac{3 + 08}{9 + 24} = \frac{3 - 08}{9 - 24}.$
- $\frac{318}{742} = \frac{3 \times 1 \times 8}{7 \times 4 \times 2} = \frac{3 + 18}{7 + 42} = \frac{3 - 18}{7 - 42}.$
- $\frac{416}{728} = \frac{4 \times 16}{7 \times 2 \times 8} = \frac{4 + 16}{7 + 28} = \frac{4 - 16}{7 - 28}.$
- $\frac{416}{832} = \frac{4 \times 1 \times 6}{8 \times 3 \times 2} = \frac{4 + 16}{8 + 32} = \frac{4 - 16}{8 - 32}.$

- $\frac{632}{948} = \frac{6 \times 32}{9 \times 4 \times 8} = \frac{6 + 32}{9 + 48} = \frac{6 - 32}{9 - 48}.$
- $\frac{203}{5481} = \frac{20 \times 3}{5 \times 4 \times 81} = \frac{2 + 03}{54 + 81} = \frac{2 - 03}{54 - 81}.$
- $\frac{302}{8154} = \frac{30 \times 2}{81 \times 5 \times 4} = \frac{3 + 02}{81 + 54} = \frac{3 - 02}{81 - 54}.$
- $\frac{413}{2065} = \frac{4 \times 1 \times 3}{2 \times 06 \times 5} = \frac{4 + 13}{20 + 65} = \frac{4 - 13}{20 - 65}.$
- $\frac{453}{1208} = \frac{4 \times 5 \times 3}{1 \times 20 \times 8} = \frac{45 + 3}{120 + 8} = \frac{45 - 3}{120 - 8}.$
- $\frac{609}{3248} = \frac{6 \times 09}{3 \times 2 \times 48} = \frac{6 + 09}{32 + 48} = \frac{6 - 09}{32 - 48}.$
- $\frac{615}{3280} = \frac{6 \times 15}{3 \times 2 \times 80} = \frac{6 + 15}{32 + 80} = \frac{6 - 15}{32 - 80}.$
- $\frac{652}{1304} = \frac{6 \times 5 \times 2}{1 \times 30 \times 4} = \frac{65 + 2}{130 + 4} = \frac{65 - 2}{130 - 4}.$
- $\frac{654}{1308} = \frac{6 \times 5 \times 4}{1 \times 30 \times 8} = \frac{65 + 4}{130 + 8} = \frac{65 - 4}{130 - 8}.$
- $\frac{728}{1456} = \frac{7 \times 2 \times 8}{1 \times 4 \times 56} = \frac{7 + 28}{14 + 56} = \frac{7 - 28}{14 - 56}.$
- $\frac{782}{1564} = \frac{7 \times 8 \times 2}{1 \times 56 \times 4} = \frac{78 + 2}{156 + 4} = \frac{78 - 2}{156 - 4}.$
- $\frac{791}{6328} = \frac{7 \times 9 \times 1}{6 \times 3 \times 28} = \frac{79 + 1}{632 + 8} = \frac{79 - 1}{632 - 8}.$
- $\frac{792}{3168} = \frac{7 \times 9 \times 2}{3 \times 168} = \frac{79 + 2}{316 + 8} = \frac{79 - 2}{316 - 8}.$
- $\frac{810}{3645} = \frac{8 \times 10}{3 \times 6 \times 4 \times 5} = \frac{8 + 10}{36 + 45} = \frac{8 - 10}{36 - 45}.$
- $\frac{812}{3045} = \frac{8 \times 1 \times 2}{3 \times 04 \times 5} = \frac{8 + 12}{30 + 45} = \frac{8 - 12}{30 - 45}.$
- $\frac{813}{4065} = \frac{8 \times 1 \times 3}{4 \times 06 \times 5} = \frac{8 + 13}{40 + 65} = \frac{8 - 13}{40 - 65}.$
- $\frac{819}{2457} = \frac{8 \times 19}{2 \times 4 \times 57} = \frac{8 + 19}{24 + 57} = \frac{8 - 19}{24 - 57}.$
- $\frac{982}{1473} = \frac{98 \times 2}{14 \times 7 \times 3} = \frac{98 + 2}{147 + 3} = \frac{98 - 2}{147 - 3}.$
- $\frac{1208}{5436} = \frac{1 \times 20 \times 8}{5 \times 4 \times 36} = \frac{12 + 08}{54 + 36} = \frac{12 - 08}{54 - 36}.$
- $\frac{1407}{5829} = \frac{1 \times 40 \times 7}{5 \times 8 \times 29} = \frac{14 + 07}{58 + 29} = \frac{14 - 07}{58 - 29}.$
- $\frac{1645}{3290} = \frac{1 \times 6 \times 45}{3 \times 2 \times 90} = \frac{16 + 45}{32 + 90} = \frac{16 - 45}{32 - 90}.$
- $\frac{1827}{3654} = \frac{18 \times 27}{3 \times 6 \times 54} = \frac{18 + 27}{36 + 54} = \frac{18 - 27}{36 - 54}.$
- $\frac{1845}{3690} = \frac{18 \times 45}{3 \times 6 \times 90} = \frac{18 + 45}{36 + 90} = \frac{18 - 45}{36 - 90}.$
- $\frac{1854}{2369} = \frac{18 \times 54}{23 \times 6 \times 9} = \frac{18 + 54}{23 + 69} = \frac{18 - 54}{23 - 69}.$
- $\frac{1854}{3296} = \frac{18 \times 54}{32 \times 9 \times 6} = \frac{18 + 54}{32 + 96} = \frac{18 - 54}{32 - 96}.$
- $\frac{2036}{4581} = \frac{20 \times 36}{4 \times 5 \times 81} = \frac{20 + 36}{45 + 81} = \frac{20 - 36}{45 - 81}.$
- $\frac{2078}{4156} = \frac{2 \times 07 \times 8}{4 \times 1 \times 56} = \frac{2 + 078}{4 + 156} = \frac{2 - 078}{4 - 156}.$
- $\frac{2098}{3147} = \frac{2 \times 098}{3 \times 14 \times 7} = \frac{2 + 098}{3 + 147} = \frac{2 - 098}{3 - 147}.$
- $\frac{2460}{3895} = \frac{24 \times 60}{3 \times 8 \times 95} = \frac{24 + 60}{38 + 95} = \frac{24 - 60}{38 - 95}.$
- $\frac{2718}{5436} = \frac{27 \times 18}{54 \times 3 \times 6} = \frac{27 + 18}{54 + 36} = \frac{27 - 18}{54 - 36}.$
- $\frac{3042}{6591} = \frac{30 \times 42}{6 \times 5 \times 91} = \frac{30 + 42}{65 + 91} = \frac{30 - 42}{65 - 91}.$
- $\frac{3405}{6129} = \frac{3 \times 4 \times 05}{6 \times 1 \times 2 \times 9} = \frac{340 + 5}{612 + 9} = \frac{340 - 5}{612 - 9}.$
- $\frac{3620}{8145} = \frac{36 \times 20}{81 \times 4 \times 5} = \frac{36 + 20}{81 + 45} = \frac{36 - 20}{81 - 45}.$

$$\bullet \frac{3842}{9605} = \frac{3 \times 8 \times 4 \times 2}{96 \times 05} = \frac{384 + 2}{960 + 5} = \frac{384 - 2}{960 - 5}.$$

$$\bullet \frac{402}{15879} = \frac{40 \times 2}{1 \times 5 \times 8 \times 79} = \frac{4 + 02}{158 + 79} = \frac{4 - 02}{158 - 79}.$$

$$\bullet \frac{4230}{9165} = \frac{42 \times 30}{91 \times 6 \times 5} = \frac{42 + 30}{91 + 65} = \frac{42 - 30}{91 - 65}.$$

$$\bullet \frac{5418}{6923} = \frac{54 \times 18}{6 \times 9 \times 23} = \frac{54 + 18}{69 + 23} = \frac{54 - 18}{69 - 23}.$$

$$\bullet \frac{5418}{9632} = \frac{54 \times 18}{9 \times 6 \times 32} = \frac{54 + 18}{96 + 32} = \frac{54 - 18}{96 - 32}.$$

$$\bullet \frac{601}{53489} = \frac{60 \times 1}{5 \times 3 \times 4 \times 89} = \frac{6 + 01}{534 + 89} = \frac{6 - 01}{534 - 89}.$$

$$\bullet \frac{6024}{9538} = \frac{60 \times 24}{95 \times 3 \times 8} = \frac{60 + 24}{95 + 38} = \frac{60 - 24}{95 - 38}.$$

$$\bullet \frac{701}{36452} = \frac{70 \times 1}{364 \times 5 \times 2} = \frac{7 + 01}{364 + 52} = \frac{7 - 01}{364 - 52}.$$

$$\bullet \frac{702}{18954} = \frac{70 \times 2}{189 \times 5 \times 4} = \frac{7 + 02}{189 + 54} = \frac{7 - 02}{189 - 54}.$$

$$\bullet \frac{806}{12493} = \frac{8 \times 06}{1 \times 2 \times 4 \times 93} = \frac{8 + 06}{124 + 93} = \frac{8 - 06}{124 - 93}.$$

$$\bullet \frac{901}{46852} = \frac{90 \times 1}{468 \times 5 \times 2} = \frac{9 + 01}{468 + 52} = \frac{9 - 01}{468 - 52}.$$

$$\bullet \frac{1602}{58473} = \frac{160 \times 2}{5 \times 8 \times 4 \times 73} = \frac{16 + 02}{584 + 73} = \frac{16 - 02}{584 - 73}.$$

$$\bullet \frac{2016}{73584} = \frac{20 \times 16}{73 \times 5 \times 8 \times 4} = \frac{2 + 016}{73 + 584} = \frac{2 - 016}{73 - 584}.$$

$$\bullet \frac{2403}{56871} = \frac{240 \times 3}{5 \times 6 \times 8 \times 71} = \frac{24 + 03}{568 + 71} = \frac{24 - 03}{568 - 71}.$$

$$\bullet \frac{3024}{71568} = \frac{30 \times 24}{71 \times 5 \times 6 \times 8} = \frac{3 + 024}{71 + 568} = \frac{3 - 024}{71 - 568}.$$

$$\bullet \frac{3582}{10746} = \frac{35 \times 8 \times 2}{10 \times 7 \times 4 \times 6} = \frac{358 + 2}{1074 + 6} = \frac{358 - 2}{1074 - 6}.$$

$$\bullet \frac{4581}{32067} = \frac{45 \times 8 \times 1}{3 \times 20 \times 6 \times 7} = \frac{458 + 1}{3206 + 7} = \frac{458 - 1}{3206 - 7}.$$

$$\bullet \frac{4609}{13827} = \frac{4 \times 6 \times 09}{1 \times 3 \times 8 \times 27} = \frac{46 + 09}{138 + 27} = \frac{46 - 09}{138 - 27}.$$

$$\bullet \frac{5427}{18693} = \frac{54 \times 27}{186 \times 9 \times 3} = \frac{54 + 27}{186 + 93} = \frac{54 - 27}{186 - 93}.$$

$$\bullet \frac{6012}{43587} = \frac{60 \times 12}{4 \times 3 \times 5 \times 87} = \frac{60 + 12}{435 + 87} = \frac{60 - 12}{435 - 87}.$$

$$\bullet \frac{7018}{24563} = \frac{70 \times 18}{245 \times 6 \times 3} = \frac{70 + 18}{245 + 63} = \frac{70 - 18}{245 - 63}.$$

$$\bullet \frac{7418}{25963} = \frac{74 \times 18}{259 \times 6 \times 3} = \frac{74 + 18}{259 + 63} = \frac{74 - 18}{259 - 63}.$$

$$\bullet \frac{8016}{23547} = \frac{80 \times 1 \times 6}{2 \times 3 \times 5 \times 47} = \frac{80 + 16}{235 + 47} = \frac{80 - 16}{235 - 47}.$$

$$\bullet \frac{8169}{24507} = \frac{8 \times 169}{2 \times 4 \times 507} = \frac{8 + 169}{24 + 507} = \frac{8 - 169}{24 - 507}.$$

$$\bullet \frac{8360}{21945} = \frac{8 \times 3 \times 60}{21 \times 9 \times 4 \times 5} = \frac{8 + 360}{21 + 945} = \frac{8 - 360}{21 - 945}.$$

$$\bullet \frac{8435}{21690} = \frac{8 \times 4 \times 35}{2 \times 16 \times 90} = \frac{84 + 35}{216 + 90} = \frac{84 - 35}{216 - 90}.$$

$$\bullet \frac{9036}{18574} = \frac{90 \times 36}{18 \times 5 \times 74} = \frac{90 + 36}{185 + 74} = \frac{90 - 36}{185 - 74}.$$

$$\bullet \frac{9046}{27138} = \frac{9 \times 04 \times 6}{27 \times 1 \times 3 \times 8} = \frac{9 + 046}{27 + 138} = \frac{9 - 046}{27 - 138}.$$

$$\bullet \frac{12096}{73584} = \frac{1 \times 20 \times 96}{73 \times 5 \times 8 \times 4} = \frac{12 + 096}{73 + 584} = \frac{12 - 096}{73 - 584}.$$

$$\bullet \frac{13608}{45927} = \frac{1 \times 3 \times 60 \times 8}{4 \times 5 \times 9 \times 27} = \frac{136 + 08}{459 + 27} = \frac{136 - 08}{459 - 27}.$$

$$\bullet \frac{16032}{48597} = \frac{160 \times 32}{4 \times 8 \times 5 \times 97} = \frac{160 + 32}{485 + 97} = \frac{160 - 32}{485 - 97}.$$

$$\bullet \frac{16485}{32970} = \frac{1 \times 6 \times 485}{3 \times 2 \times 970} = \frac{16 + 485}{32 + 970} = \frac{16 - 485}{32 - 970}.$$

$$\bullet \frac{17068}{23594} = \frac{1 \times 70 \times 68}{2 \times 35 \times 94} = \frac{170 + 68}{235 + 94} = \frac{170 - 68}{235 - 94}.$$

- $\frac{18270}{63945} = \frac{18 \times 270}{6 \times 3 \times 945} = \frac{18 + 270}{63 + 945} = \frac{18 - 270}{63 - 945}$ .
- $\frac{32160}{97485} = \frac{32 \times 160}{97 \times 4 \times 8 \times 5} = \frac{32 + 160}{97 + 485} = \frac{32 - 160}{97 - 485}$ .
- $\frac{18537}{46092} = \frac{18 \times 5 \times 37}{460 \times 9 \times 2} = \frac{185 + 37}{460 + 92} = \frac{185 - 37}{460 - 92}$ .
- $\frac{37185}{92460} = \frac{37 \times 18 \times 5}{9 \times 2 \times 460} = \frac{37 + 185}{92 + 460} = \frac{37 - 185}{92 - 460}$ .
- $\frac{23046}{79158} = \frac{2 \times 30 \times 46}{79 \times 15 \times 8} = \frac{23 + 046}{79 + 158} = \frac{23 - 046}{79 - 158}$ .
- $\frac{48516}{97032} = \frac{485 \times 1 \times 6}{970 \times 3 \times 2} = \frac{485 + 16}{970 + 32} = \frac{485 - 16}{970 - 32}$ .
- $\frac{27018}{94563} = \frac{270 \times 18}{945 \times 6 \times 3} = \frac{270 + 18}{945 + 63} = \frac{270 - 18}{945 - 63}$ .
- $\frac{68170}{94235} = \frac{68 \times 1 \times 70}{94 \times 2 \times 35} = \frac{68 + 170}{94 + 235} = \frac{68 - 170}{94 - 235}$ .
- $\frac{32064}{79158} = \frac{3 \times 20 \times 64}{79 \times 15 \times 8} = \frac{32 + 064}{79 + 158} = \frac{32 - 064}{79 - 158}$ .
- $\frac{73248}{91560} = \frac{7 \times 3 \times 24 \times 8}{9 \times 1 \times 560} = \frac{732 + 48}{915 + 60} = \frac{732 - 48}{915 - 60}$ .

### 3.3 Dottable with Addable and Subtractable: Double Representations

- $\frac{963}{1284} = \frac{96 \times 3}{12 \times 8 \times 4} = \frac{96 + 3}{128 + 4} = \frac{96 - 3}{128 - 4} = \frac{9 + 63}{12 + 84} = \frac{9 - 63}{12 - 84}$ .
- $\frac{3096}{4128} = \frac{3 \times 096}{4 \times 12 \times 8} = \frac{309 + 6}{412 + 8} = \frac{309 - 6}{412 - 8} = \frac{3 + 096}{4 + 128} = \frac{3 - 096}{4 - 128}$ .
- $\frac{8102}{36459} = \frac{810 \times 2}{3 \times 6 \times 45 \times 9} = \frac{810 + 2}{3645 + 9} = \frac{810 - 2}{3645 - 9} = \frac{8 + 102}{36 + 459} = \frac{8 - 102}{36 - 459}$ .
- $\frac{8306}{12459} = \frac{8 \times 30 \times 6}{12 \times 4 \times 5 \times 9} = \frac{8 + 306}{12 + 459} = \frac{8 - 306}{12 - 459} = \frac{830 + 6}{1245 + 9} = \frac{830 - 6}{1245 - 9}$ .
- $\frac{8630}{12945} = \frac{8 \times 6 \times 30}{12 \times 9 \times 4 \times 5} = \frac{8 + 630}{12 + 945} = \frac{8 - 630}{12 - 945} = \frac{86 + 30}{129 + 45} = \frac{86 - 30}{129 - 45}$ .
- $\frac{13548}{27096} = \frac{1 \times 3 \times 54 \times 8}{27 \times 096} = \frac{135 + 48}{270 + 96} = \frac{135 - 48}{270 - 96} = \frac{1 + 3548}{2 + 7096} = \frac{1 - 3548}{2 - 7096}$ .
- $\frac{18306}{27459} = \frac{18 \times 30 \times 6}{27 \times 4 \times 5 \times 9} = \frac{1830 + 6}{2745 + 9} = \frac{1830 - 6}{2745 - 9} = \frac{18 + 306}{27 + 459} = \frac{18 - 306}{27 - 459}$ .
- $\frac{18630}{27945} = \frac{18 \times 6 \times 30}{27 \times 9 \times 4 \times 5} = \frac{18 + 630}{27 + 945} = \frac{18 - 630}{27 - 945} = \frac{186 + 30}{279 + 45} = \frac{186 - 30}{279 - 45}$ .
- $\frac{30186}{45279} = \frac{30 \times 18 \times 6}{4 \times 5 \times 27 \times 9} = \frac{3018 + 6}{4527 + 9} = \frac{3018 - 6}{4527 - 9} = \frac{30 + 186}{45 + 279} = \frac{30 - 186}{45 - 279}$ .
- $\frac{30618}{45927} = \frac{30 \times 6 \times 18}{4 \times 5 \times 9 \times 27} = \frac{306 + 18}{459 + 27} = \frac{306 - 18}{459 - 27} = \frac{30 + 618}{45 + 927} = \frac{30 - 618}{45 - 927}$ .
- $\frac{30792}{61584} = \frac{30 \times 7 \times 9 \times 2}{6 \times 15 \times 84} = \frac{3079 + 2}{6158 + 4} = \frac{3079 - 2}{6158 - 4} = \frac{3 + 0792}{6 + 1584} = \frac{3 - 0792}{6 - 1584}$ .
- $\frac{61830}{92745} = \frac{6 \times 18 \times 30}{9 \times 27 \times 4 \times 5} = \frac{618 + 30}{927 + 45} = \frac{618 - 30}{927 - 45} = \frac{6 + 1830}{9 + 2745} = \frac{6 - 1830}{9 - 2745}$ .
- $\frac{63018}{94527} = \frac{6 \times 30 \times 18}{9 \times 4 \times 5 \times 27} = \frac{630 + 18}{945 + 27} = \frac{630 - 18}{945 - 27} = \frac{6 + 3018}{9 + 4527} = \frac{6 - 3018}{9 - 4527}$ .

## 4 Symmetric Equivalent Selfie Fractions

This section is divided in two subsections. The first one give multiple ways of writing with addition and subtraction. The second give just single representation having addition and subtraction in each case.

### 4.1 Double Representations

In this subsection, we shall give selfie fractions that can be represented in using addition and subtraction separately. In each case we have double representing choices.

- $\frac{134}{268} = \frac{1-34}{2-68} = \frac{1+34}{2+68} = \frac{13-4}{26-8} = \frac{13+4}{26+8}$ .
- $\frac{936}{1248} = \frac{9-36}{12-48} = \frac{9+36}{12+48} = \frac{93-6}{124-8} = \frac{93+6}{124+8}$ .
- $\frac{143}{286} = \frac{1-43}{2-86} = \frac{1+43}{2+86} = \frac{14-3}{28-6} = \frac{14+3}{28+6}$ .
- $\frac{963}{1284} = \frac{9-63}{12-84} = \frac{9+63}{12+84} = \frac{96-3}{128-4} = \frac{96+3}{128+4}$ .
- $\frac{314}{628} = \frac{3-14}{6-28} = \frac{3+14}{6+28} = \frac{31-4}{62-8} = \frac{31+4}{62+8}$ .
- $\frac{1345}{2690} = \frac{1-345}{2-690} = \frac{1+345}{2+690} = \frac{13-45}{26-90} = \frac{13+45}{26+90}$ .
- $\frac{341}{682} = \frac{3-41}{6-82} = \frac{3+41}{6+82} = \frac{34-1}{68-2} = \frac{34+1}{68+2}$ .
- $\frac{1354}{2708} = \frac{1-354}{2-708} = \frac{1+354}{2+708} = \frac{135-4}{270-8} = \frac{135+4}{270+8}$ .
- $\frac{413}{826} = \frac{4-13}{8-26} = \frac{4+13}{8+26} = \frac{41-3}{82-6} = \frac{41+3}{82+6}$ .
- $\frac{1435}{2870} = \frac{1-435}{2-870} = \frac{1+435}{2+870} = \frac{14-35}{28-70} = \frac{14+35}{28+70}$ .
- $\frac{431}{862} = \frac{4-31}{8-62} = \frac{4+31}{8+62} = \frac{43-1}{86-2} = \frac{43+1}{86+2}$ .
- $\frac{1453}{2906} = \frac{1-453}{2-906} = \frac{1+453}{2+906} = \frac{145-3}{290-6} = \frac{145+3}{290+6}$ .
- $\frac{1536}{2048} = \frac{15-36}{20-48} = \frac{15+36}{20+48} = \frac{153-6}{204-8} = \frac{153+6}{204+8}$ .
- $\frac{532}{1064} = \frac{5-32}{10-64} = \frac{5+32}{10+64} = \frac{53-2}{106-4} = \frac{53+2}{106+4}$ .
- $\frac{1563}{2084} = \frac{15-63}{20-84} = \frac{15+63}{20+84} = \frac{156-3}{208-4} = \frac{156+3}{208+4}$ .
- $\frac{1823}{5469} = \frac{18-23}{54-69} = \frac{18+23}{54+69} = \frac{182-3}{546-9} = \frac{182+3}{546+9}$ .
- $\frac{1832}{5496} = \frac{18-32}{54-96} = \frac{18+32}{54+96} = \frac{183-2}{549-6} = \frac{183+2}{549+6}$ .
- $\frac{2183}{6549} = \frac{2-183}{6-549} = \frac{2+183}{6+549} = \frac{218-3}{654-9} = \frac{218+3}{654+9}$ .
- $\frac{2318}{6954} = \frac{2-318}{6-954} = \frac{2+318}{6+954} = \frac{23-18}{69-54} = \frac{23+18}{69+54}$ .
- $\frac{2546}{3819} = \frac{2-546}{3-819} = \frac{2+546}{3+819} = \frac{254-6}{381-9} = \frac{254+6}{381+9}$ .
- $\frac{2654}{3981} = \frac{2-654}{3-981} = \frac{2+654}{3+981} = \frac{26-54}{39-81} = \frac{26+54}{39+81}$ .
- $\frac{3145}{6290} = \frac{3-145}{6-290} = \frac{3+145}{6+290} = \frac{31-45}{62-90} = \frac{31+45}{62+90}$ .

$$\bullet \frac{3156}{4208} = \frac{3 - 156}{4 - 208} = \frac{3 + 156}{4 + 208} = \frac{315 - 6}{420 - 8} = \frac{315 + 6}{420 + 8}.$$

$$\bullet \frac{3182}{9546} = \frac{3 - 182}{9 - 546} = \frac{3 + 182}{9 + 546} = \frac{318 - 2}{954 - 6} = \frac{318 + 2}{954 + 6}.$$

$$\bullet \frac{3218}{9654} = \frac{3 - 218}{9 - 654} = \frac{3 + 218}{9 + 654} = \frac{32 - 18}{96 - 54} = \frac{32 + 18}{96 + 54}.$$

$$\bullet \frac{3451}{6902} = \frac{3 - 451}{6 - 902} = \frac{3 + 451}{6 + 902} = \frac{345 - 1}{690 - 2} = \frac{345 + 1}{690 + 2}.$$

$$\bullet \frac{3514}{7028} = \frac{35 - 14}{70 - 28} = \frac{35 + 14}{70 + 28} = \frac{351 - 4}{702 - 8} = \frac{351 + 4}{702 + 8}.$$

$$\bullet \frac{3541}{7082} = \frac{35 - 41}{70 - 82} = \frac{35 + 41}{70 + 82} = \frac{354 - 1}{708 - 2} = \frac{354 + 1}{708 + 2}.$$

$$\bullet \frac{3615}{4820} = \frac{3 - 615}{4 - 820} = \frac{3 + 615}{4 + 820} = \frac{36 - 15}{48 - 20} = \frac{36 + 15}{48 + 20}.$$

$$\bullet \frac{4135}{8270} = \frac{4 - 135}{8 - 270} = \frac{4 + 135}{8 + 270} = \frac{41 - 35}{82 - 70} = \frac{41 + 35}{82 + 70}.$$

$$\bullet \frac{4351}{8702} = \frac{4 - 351}{8 - 702} = \frac{4 + 351}{8 + 702} = \frac{435 - 1}{870 - 2} = \frac{435 + 1}{870 + 2}.$$

$$\bullet \frac{4513}{9026} = \frac{45 - 13}{90 - 26} = \frac{45 + 13}{90 + 26} = \frac{451 - 3}{902 - 6} = \frac{451 + 3}{902 + 6}.$$

$$\bullet \frac{4531}{9062} = \frac{45 - 31}{90 - 62} = \frac{45 + 31}{90 + 62} = \frac{453 - 1}{906 - 2} = \frac{453 + 1}{906 + 2}.$$

$$\bullet \frac{5426}{8139} = \frac{54 - 26}{81 - 39} = \frac{54 + 26}{81 + 39} = \frac{542 - 6}{813 - 9} = \frac{542 + 6}{813 + 9}.$$

$$\bullet \frac{5462}{8193} = \frac{54 - 62}{81 - 93} = \frac{54 + 62}{81 + 93} = \frac{546 - 2}{819 - 3} = \frac{546 + 2}{819 + 3}.$$

$$\bullet \frac{6153}{8204} = \frac{6 - 153}{8 - 204} = \frac{6 + 153}{8 + 204} = \frac{615 - 3}{820 - 4} = \frac{615 + 3}{820 + 4}.$$

$$\bullet \frac{6254}{9381} = \frac{6 - 254}{9 - 381} = \frac{6 + 254}{9 + 381} = \frac{62 - 54}{93 - 81} = \frac{62 + 54}{93 + 81}.$$

$$\bullet \frac{6315}{8420} = \frac{6 - 315}{8 - 420} = \frac{6 + 315}{8 + 420} = \frac{63 - 15}{84 - 20} = \frac{63 + 15}{84 + 20}.$$

$$\bullet \frac{6542}{9813} = \frac{6 - 542}{9 - 813} = \frac{6 + 542}{9 + 813} = \frac{654 - 2}{981 - 3} = \frac{654 + 2}{981 + 3}.$$

$$\bullet \frac{5238}{10476} = \frac{5 - 238}{10 - 476} = \frac{5 + 238}{10 + 476} = \frac{52 - 38}{104 - 76} = \frac{52 + 38}{104 + 76}.$$

$$\bullet \frac{5239}{10478} = \frac{5 - 239}{10 - 478} = \frac{5 + 239}{10 + 478} = \frac{52 - 39}{104 - 78} = \frac{52 + 39}{104 + 78}.$$

$$\bullet \frac{5364}{10728} = \frac{5 - 364}{10 - 728} = \frac{5 + 364}{10 + 728} = \frac{536 - 4}{1072 - 8} = \frac{536 + 4}{1072 + 8}.$$

$$\bullet \frac{5382}{10764} = \frac{5 - 382}{10 - 764} = \frac{5 + 382}{10 + 764} = \frac{538 - 2}{1076 - 4} = \frac{538 + 2}{1076 + 4}.$$

$$\bullet \frac{5392}{10784} = \frac{5 - 392}{10 - 784} = \frac{5 + 392}{10 + 784} = \frac{539 - 2}{1078 - 4} = \frac{539 + 2}{1078 + 4}.$$

$$\bullet \frac{5436}{10872} = \frac{5 - 436}{10 - 872} = \frac{5 + 436}{10 + 872} = \frac{54 - 36}{108 - 72} = \frac{54 + 36}{108 + 72}.$$

$$\bullet \frac{5823}{17469} = \frac{58 - 23}{174 - 69} = \frac{58 + 23}{174 + 69} = \frac{582 - 3}{1746 - 9} = \frac{582 + 3}{1746 + 9}.$$

$$\bullet \frac{5832}{17496} = \frac{58 - 32}{174 - 96} = \frac{58 + 32}{174 + 96} = \frac{583 - 2}{1749 - 6} = \frac{583 + 2}{1749 + 6}.$$

$$\bullet \frac{6354}{12708} = \frac{6 - 354}{12 - 708} = \frac{6 + 354}{12 + 708} = \frac{635 - 4}{1270 - 8} = \frac{635 + 4}{1270 + 8}.$$

$$\bullet \frac{6435}{12870} = \frac{6 - 435}{12 - 870} = \frac{6 + 435}{12 + 870} = \frac{64 - 35}{128 - 70} = \frac{64 + 35}{128 + 70}.$$

$$\bullet \frac{7293}{14586} = \frac{7 - 293}{14 - 586} = \frac{7 + 293}{14 + 586} = \frac{729 - 3}{1458 - 6} = \frac{729 + 3}{1458 + 6}.$$

$$\bullet \frac{7329}{14658} = \frac{7 - 329}{14 - 658} = \frac{7 + 329}{14 + 658} = \frac{73 - 29}{146 - 58} = \frac{73 + 29}{146 + 58}.$$

$$\bullet \frac{7923}{15846} = \frac{79 - 23}{158 - 46} = \frac{79 + 23}{158 + 46} = \frac{792 - 3}{1584 - 6} = \frac{792 + 3}{1584 + 6}.$$

$$\bullet \frac{7932}{15864} = \frac{79 - 32}{158 - 64} = \frac{79 + 32}{158 + 64} = \frac{793 - 2}{1586 - 4} = \frac{793 + 2}{1586 + 4}.$$

$$\bullet \frac{8102}{36459} = \frac{8 - 102}{36 - 459} = \frac{8 + 102}{36 + 459} = \frac{810 - 2}{3645 - 9} = \frac{810 + 2}{3645 + 9}.$$

$$\bullet \frac{8210}{36945} = \frac{8 - 210}{36 - 945} = \frac{8 + 210}{36 + 945} = \frac{82 - 10}{369 - 45} = \frac{82 + 10}{369 + 45}.$$

$$\bullet \frac{8235}{16470} = \frac{8 - 235}{16 - 470} = \frac{8 + 235}{16 + 470} = \frac{82 - 35}{164 - 70} = \frac{82 + 35}{164 + 70}.$$

$$\bullet \frac{8306}{12459} = \frac{8 - 306}{12 - 459} = \frac{8 + 306}{12 + 459} = \frac{830 - 6}{1245 - 9} = \frac{830 + 6}{1245 + 9}.$$

$$\bullet \frac{8352}{16704} = \frac{8 - 352}{16 - 704} = \frac{8 + 352}{16 + 704} = \frac{835 - 2}{1670 - 4} = \frac{835 + 2}{1670 + 4}.$$

$$\bullet \frac{8523}{17046} = \frac{85 - 23}{170 - 46} = \frac{85 + 23}{170 + 46} = \frac{852 - 3}{1704 - 6} = \frac{852 + 3}{1704 + 6}.$$

$$\bullet \frac{8532}{17064} = \frac{85 - 32}{170 - 64} = \frac{85 + 32}{170 + 64} = \frac{853 - 2}{1706 - 4} = \frac{853 + 2}{1706 + 4}.$$

$$\bullet \frac{8630}{12945} = \frac{8 - 630}{12 - 945} = \frac{8 + 630}{12 + 945} = \frac{86 - 30}{129 - 45} = \frac{86 + 30}{129 + 45}.$$

$$\bullet \frac{9235}{18470} = \frac{9 - 235}{18 - 470} = \frac{9 + 235}{18 + 470} = \frac{92 - 35}{184 - 70} = \frac{92 + 35}{184 + 70}.$$

$$\bullet \frac{9273}{18546} = \frac{9 - 273}{18 - 546} = \frac{9 + 273}{18 + 546} = \frac{927 - 3}{1854 - 6} = \frac{927 + 3}{1854 + 6}.$$

$$\bullet \frac{9327}{18654} = \frac{9 - 327}{18 - 654} = \frac{9 + 327}{18 + 654} = \frac{93 - 27}{186 - 54} = \frac{93 + 27}{186 + 54}.$$

$$\bullet \frac{9352}{18704} = \frac{9 - 352}{18 - 704} = \frac{9 + 352}{18 + 704} = \frac{935 - 2}{1870 - 4} = \frac{935 + 2}{1870 + 4}.$$

$$\bullet \frac{13485}{26970} = \frac{1 - 3485}{2 - 6970} = \frac{1 + 3485}{2 + 6970} = \frac{13 - 485}{26 - 970} = \frac{13 + 485}{26 + 970}.$$

$$\bullet \frac{13548}{27096} = \frac{1 - 3548}{2 - 7096} = \frac{1 + 3548}{2 + 7096} = \frac{135 - 48}{270 - 96} = \frac{135 + 48}{270 + 96}.$$

$$\bullet \frac{13845}{27690} = \frac{1 - 3845}{2 - 7690} = \frac{1 + 3845}{2 + 7690} = \frac{138 - 45}{276 - 90} = \frac{138 + 45}{276 + 90}.$$

$$\bullet \frac{14538}{29076} = \frac{1 - 4538}{2 - 9076} = \frac{1 + 4538}{2 + 9076} = \frac{145 - 38}{290 - 76} = \frac{145 + 38}{290 + 76}.$$

$$\bullet \frac{14835}{29670} = \frac{1 - 4835}{2 - 9670} = \frac{1 + 4835}{2 + 9670} = \frac{148 - 35}{296 - 70} = \frac{148 + 35}{296 + 70}.$$

$$\bullet \frac{14853}{29706} = \frac{1 - 4853}{2 - 9706} = \frac{1 + 4853}{2 + 9706} = \frac{1485 - 3}{2970 - 6} = \frac{1485 + 3}{2970 + 6}.$$

$$\bullet \frac{18306}{27459} = \frac{18 - 306}{27 - 459} = \frac{18 + 306}{27 + 459} = \frac{1830 - 6}{2745 - 9} = \frac{1830 + 6}{2745 + 9}.$$

$$\bullet \frac{18630}{27945} = \frac{18 - 630}{27 - 945} = \frac{18 + 630}{27 + 945} = \frac{186 - 30}{279 - 45} = \frac{186 + 30}{279 + 45}.$$

$$\bullet \frac{30186}{45279} = \frac{30 - 186}{45 - 279} = \frac{30 + 186}{45 + 279} = \frac{3018 - 6}{4527 - 9} = \frac{3018 + 6}{4527 + 9}.$$

$$\bullet \frac{30618}{45927} = \frac{30 - 618}{45 - 927} = \frac{30 + 618}{45 + 927} = \frac{306 - 18}{459 - 27} = \frac{306 + 18}{459 + 27}.$$

$$\bullet \frac{31485}{62970} = \frac{3 - 1485}{6 - 2970} = \frac{3 + 1485}{6 + 2970} = \frac{31 - 485}{62 - 970} = \frac{31 + 485}{62 + 970}.$$

$$\bullet \frac{34851}{69702} = \frac{3 - 4851}{6 - 9702} = \frac{3 + 4851}{6 + 9702} = \frac{3485 - 1}{6970 - 2} = \frac{3485 + 1}{6970 + 2}.$$

$$\bullet \frac{35148}{70296} = \frac{35 - 148}{70 - 296} = \frac{35 + 148}{70 + 296} = \frac{351 - 48}{702 - 96} = \frac{351 + 48}{702 + 96}.$$

$$\bullet \frac{35481}{70962} = \frac{35 - 481}{70 - 962} = \frac{35 + 481}{70 + 962} = \frac{3548 - 1}{7096 - 2} = \frac{3548 + 1}{7096 + 2}.$$

$$\bullet \frac{38145}{76290} = \frac{38 - 145}{76 - 290} = \frac{38 + 145}{76 + 290} = \frac{381 - 45}{762 - 90} = \frac{381 + 45}{762 + 90}.$$

$$\bullet \frac{38451}{76902} = \frac{38 - 451}{76 - 902} = \frac{38 + 451}{76 + 902} = \frac{3845 - 1}{7690 - 2} = \frac{3845 + 1}{7690 + 2}.$$

$$\bullet \frac{45138}{90276} = \frac{45 - 138}{90 - 276} = \frac{45 + 138}{90 + 276} = \frac{451 - 38}{902 - 76} = \frac{451 + 38}{902 + 76}.$$

$$\bullet \frac{45381}{90762} = \frac{45 - 381}{90 - 762} = \frac{45 + 381}{90 + 762} = \frac{4538 - 1}{9076 - 2} = \frac{4538 + 1}{9076 + 2}.$$

$$\bullet \frac{48135}{96270} = \frac{48 - 135}{96 - 270} = \frac{48 + 135}{96 + 270} = \frac{481 - 35}{962 - 70} = \frac{481 + 35}{962 + 70}.$$

$$\bullet \frac{48351}{96702} = \frac{48 - 351}{96 - 702} = \frac{48 + 351}{96 + 702} = \frac{4835 - 1}{9670 - 2} = \frac{4835 + 1}{9670 + 2}.$$

$$\bullet \frac{48513}{97026} = \frac{485 - 13}{970 - 26} = \frac{485 + 13}{970 + 26} = \frac{4851 - 3}{9702 - 6} = \frac{4851 + 3}{9702 + 6}.$$

$$\bullet \frac{48531}{97062} = \frac{485 - 31}{970 - 62} = \frac{485 + 31}{970 + 62} = \frac{4853 - 1}{9706 - 2} = \frac{4853 + 1}{9706 + 2}.$$

$$\bullet \frac{61830}{92745} = \frac{6 - 1830}{9 - 2745} = \frac{6 + 1830}{9 + 2745} = \frac{618 - 30}{927 - 45} = \frac{618 + 30}{927 + 45}.$$

$$\bullet \frac{63018}{94527} = \frac{6 - 3018}{9 - 4527} = \frac{6 + 3018}{9 + 4527} = \frac{630 - 18}{945 - 27} = \frac{630 + 18}{945 + 27}.$$

## 4.2 Single Representation

In this subsection, we shall give selfie fractions that can be represented in using *addition* and *subtraction* separately. In each case we have single representing choices. Since we have many fractions, we have divided in small subsections.

#### 4.2.1 Four Digits

- $\frac{12}{36} = \frac{1-2}{3-6} = \frac{1+2}{3+6}$ .
- $\frac{23}{69} = \frac{2-3}{6-9} = \frac{2+3}{6+9}$ .
- $\frac{36}{48} = \frac{3-6}{4-8} = \frac{3+6}{4+8}$ .
- $\frac{12}{48} = \frac{1-2}{4-8} = \frac{1+2}{4+8}$ .
- $\frac{24}{36} = \frac{2-4}{3-6} = \frac{2+4}{3+6}$ .
- $\frac{41}{82} = \frac{4-1}{8-2} = \frac{4+1}{8+2}$ .
- $\frac{13}{26} = \frac{1-3}{2-6} = \frac{1+3}{2+6}$ .
- $\frac{26}{39} = \frac{2-6}{3-9} = \frac{2+6}{3+9}$ .
- $\frac{42}{63} = \frac{4-2}{6-3} = \frac{4+2}{6+3}$ .
- $\frac{14}{28} = \frac{1-4}{2-8} = \frac{1+4}{2+8}$ .
- $\frac{31}{62} = \frac{3-1}{6-2} = \frac{3+1}{6+2}$ .
- $\frac{43}{86} = \frac{4-3}{8-6} = \frac{4+3}{8+6}$ .
- $\frac{21}{63} = \frac{2-1}{6-3} = \frac{2+1}{6+3}$ .
- $\frac{32}{64} = \frac{3-2}{6-4} = \frac{3+2}{6+4}$ .
- $\frac{62}{93} = \frac{6-2}{9-3} = \frac{6+2}{9+3}$ .
- $\frac{21}{84} = \frac{2-1}{8-4} = \frac{2+1}{8+4}$ .
- $\frac{32}{96} = \frac{3-2}{9-6} = \frac{3+2}{9+6}$ .
- $\frac{63}{84} = \frac{6-3}{8-4} = \frac{6+3}{8+4}$ .
- $\frac{23}{46} = \frac{2-3}{4-6} = \frac{2+3}{4+6}$ .
- $\frac{34}{68} = \frac{3-4}{6-8} = \frac{3+4}{6+8}$ .

#### 4.2.2 Five Digits

- $\frac{31}{248} = \frac{3-1}{24-8} = \frac{3+1}{24+8}$ .
- $\frac{42}{168} = \frac{4-2}{16-8} = \frac{4+2}{16+8}$ .
- $\frac{53}{106} = \frac{5-3}{10-6} = \frac{5+3}{10+6}$ .
- $\frac{31}{279} = \frac{3-1}{27-9} = \frac{3+1}{27+9}$ .
- $\frac{42}{189} = \frac{4-2}{18-9} = \frac{4+2}{18+9}$ .
- $\frac{54}{108} = \frac{5-4}{10-8} = \frac{5+4}{10+8}$ .
- $\frac{61}{305} = \frac{6-1}{30-5} = \frac{6+1}{30+5}$ .
- $\frac{41}{205} = \frac{4-1}{20-5} = \frac{4+1}{20+5}$ .
- $\frac{43}{129} = \frac{4-3}{12-9} = \frac{4+3}{12+9}$ .
- $\frac{61}{427} = \frac{6-1}{42-7} = \frac{6+1}{42+7}$ .
- $\frac{41}{287} = \frac{4-1}{28-7} = \frac{4+1}{28+7}$ .
- $\frac{51}{204} = \frac{5-1}{20-4} = \frac{5+1}{20+4}$ .
- $\frac{61}{549} = \frac{6-1}{54-9} = \frac{6+1}{54+9}$ .
- $\frac{63}{105} = \frac{6-3}{10-5} = \frac{6+3}{10+5}$ .
- $\frac{41}{328} = \frac{4-1}{32-8} = \frac{4+1}{32+8}$ .
- $\frac{51}{306} = \frac{5-1}{30-6} = \frac{5+1}{30+6}$ .
- $\frac{63}{147} = \frac{6-3}{14-7} = \frac{6+3}{14+7}$ .
- $\frac{41}{369} = \frac{4-1}{36-9} = \frac{4+1}{36+9}$ .
- $\frac{51}{408} = \frac{5-1}{40-8} = \frac{5+1}{40+8}$ .
- $\frac{63}{189} = \frac{6-3}{18-9} = \frac{6+3}{18+9}$ .
- $\frac{42}{105} = \frac{4-2}{10-5} = \frac{4+2}{10+5}$ .
- $\frac{52}{104} = \frac{5-2}{10-4} = \frac{5+2}{10+4}$ .
- $\frac{64}{128} = \frac{6-4}{12-8} = \frac{6+4}{12+8}$ .

$$\bullet \frac{71}{284} = \frac{7-1}{28-4} = \frac{7+1}{28+4}.$$

$$\bullet \frac{71}{426} = \frac{7-1}{42-6} = \frac{7+1}{42+6}.$$

$$\bullet \frac{71}{568} = \frac{7-1}{56-8} = \frac{7+1}{56+8}.$$

$$\bullet \frac{71}{639} = \frac{7-1}{63-9} = \frac{7+1}{63+9}.$$

$$\bullet \frac{73}{146} = \frac{7-3}{14-6} = \frac{7+3}{14+6}.$$

$$\bullet \frac{73}{219} = \frac{7-3}{21-9} = \frac{7+3}{21+9}.$$

$$\bullet \frac{81}{243} = \frac{8-1}{24-3} = \frac{8+1}{24+3}.$$

$$\bullet \frac{81}{324} = \frac{8-1}{32-4} = \frac{8+1}{32+4}.$$

$$\bullet \frac{81}{405} = \frac{8-1}{40-5} = \frac{8+1}{40+5}.$$

$$\bullet \frac{81}{567} = \frac{8-1}{56-7} = \frac{8+1}{56+7}.$$

$$\bullet \frac{81}{729} = \frac{8-1}{72-9} = \frac{8+1}{72+9}.$$

$$\bullet \frac{82}{164} = \frac{8-2}{16-4} = \frac{8+2}{16+4}.$$

$$\bullet \frac{82}{369} = \frac{8-2}{36-9} = \frac{8+2}{36+9}.$$

$$\bullet \frac{83}{249} = \frac{8-3}{24-9} = \frac{8+3}{24+9}.$$

$$\bullet \frac{84}{105} = \frac{8-4}{10-5} = \frac{8+4}{10+5}.$$

$$\bullet \frac{84}{126} = \frac{8-4}{12-6} = \frac{8+4}{12+6}.$$

$$\bullet \frac{86}{129} = \frac{8-6}{12-9} = \frac{8+6}{12+9}.$$

$$\bullet \frac{91}{273} = \frac{9-1}{27-3} = \frac{9+1}{27+3}.$$

$$\bullet \frac{91}{364} = \frac{9-1}{36-4} = \frac{9+1}{36+4}.$$

$$\bullet \frac{91}{546} = \frac{9-1}{54-6} = \frac{9+1}{54+6}.$$

$$\bullet \frac{91}{637} = \frac{9-1}{63-7} = \frac{9+1}{63+7}.$$

$$\bullet \frac{91}{728} = \frac{9-1}{72-8} = \frac{9+1}{72+8}.$$

$$\bullet \frac{92}{184} = \frac{9-2}{18-4} = \frac{9+2}{18+4}.$$

$$\bullet \frac{92}{368} = \frac{9-2}{36-8} = \frac{9+2}{36+8}.$$

$$\bullet \frac{93}{124} = \frac{9-3}{12-4} = \frac{9+3}{12+4}.$$

$$\bullet \frac{93}{186} = \frac{9-3}{18-6} = \frac{9+3}{18+6}.$$

$$\bullet \frac{93}{217} = \frac{9-3}{21-7} = \frac{9+3}{21+7}.$$

$$\bullet \frac{93}{248} = \frac{9-3}{24-8} = \frac{9+3}{24+8}.$$

$$\bullet \frac{96}{128} = \frac{9-6}{12-8} = \frac{9+6}{12+8}.$$

#### 4.2.3 Six Digits

$$\bullet \frac{102}{357} = \frac{10-2}{35-7} = \frac{10+2}{35+7}.$$

$$\bullet \frac{102}{459} = \frac{10-2}{45-9} = \frac{10+2}{45+9}.$$

$$\bullet \frac{126}{378} = \frac{1-26}{3-78} = \frac{1+26}{3+78}.$$

$$\bullet \frac{129}{387} = \frac{1-29}{3-87} = \frac{1+29}{3+87}.$$

$$\bullet \frac{135}{270} = \frac{1-35}{2-70} = \frac{1+35}{2+70}.$$

$$\bullet \frac{138}{276} = \frac{1-38}{2-76} = \frac{1+38}{2+76}.$$

$$\bullet \frac{139}{278} = \frac{1-39}{2-78} = \frac{1+39}{2+78}.$$

$$\bullet \frac{142}{568} = \frac{14-2}{56-8} = \frac{14+2}{56+8}.$$

$$\bullet \frac{142}{639} = \frac{14-2}{63-9} = \frac{14+2}{63+9}.$$

$$\bullet \frac{145}{290} = \frac{1-45}{2-90} = \frac{1+45}{2+90}.$$

$$\bullet \frac{148}{296} = \frac{1-48}{2-96} = \frac{1+48}{2+96}.$$

$$\bullet \frac{152}{304} = \frac{15-2}{30-4} = \frac{15+2}{30+4}.$$

$$\bullet \frac{152}{608} = \frac{15-2}{60-8} = \frac{15+2}{60+8}.$$

$$\bullet \frac{153}{204} = \frac{15-3}{20-4} = \frac{15+3}{20+4}.$$

$$\bullet \frac{153}{408} = \frac{15-3}{40-8} = \frac{15+3}{40+8}.$$

$$\bullet \frac{154}{308} = \frac{15-4}{30-8} = \frac{15+4}{30+8}.$$

$$\bullet \frac{156}{208} = \frac{15-6}{20-8} = \frac{15+6}{20+8}.$$

$$\bullet \frac{162}{405} = \frac{16-2}{40-5} = \frac{16+2}{40+5}.$$

$$\bullet \frac{163}{489} = \frac{16-3}{48-9} = \frac{16+3}{48+9}.$$

$$\bullet \frac{164}{205} = \frac{16-4}{20-5} = \frac{16+4}{20+5}.$$

$$\bullet \frac{164}{287} = \frac{16-4}{28-7} = \frac{16+4}{28+7}.$$

$$\bullet \frac{164}{328} = \frac{16-4}{32-8} = \frac{16+4}{32+8}.$$

$$\bullet \frac{182}{364} = \frac{18-2}{36-4} = \frac{18+2}{36+4}.$$

$$\bullet \frac{182}{546} = \frac{18-2}{54-6} = \frac{18+2}{54+6}.$$

$$\bullet \frac{182}{637} = \frac{18-2}{63-7} = \frac{18+2}{63+7}.$$

$$\bullet \frac{183}{427} = \frac{18-3}{42-7} = \frac{18+3}{42+7}.$$

$$\bullet \frac{183}{549} = \frac{18-3}{54-9} = \frac{18+3}{54+9}.$$

$$\bullet \frac{184}{276} = \frac{18-4}{27-6} = \frac{18+4}{27+6}.$$

$$\bullet \frac{186}{279} = \frac{18-6}{27-9} = \frac{18+6}{27+9}.$$

$$\bullet \frac{192}{384} = \frac{19-2}{38-4} = \frac{19+2}{38+4}.$$

$$\bullet \frac{192}{576} = \frac{19-2}{57-6} = \frac{19+2}{57+6}.$$

$$\bullet \frac{192}{768} = \frac{19-2}{76-8} = \frac{19+2}{76+8}.$$

$$\bullet \frac{204}{357} = \frac{20-4}{35-7} = \frac{20+4}{35+7}.$$

$$\bullet \frac{205}{369} = \frac{20-5}{36-9} = \frac{20+5}{36+9}.$$

$$\bullet \frac{210}{735} = \frac{2-10}{7-35} = \frac{2+10}{7+35}.$$

$$\bullet \frac{210}{945} = \frac{2-10}{9-45} = \frac{2+10}{9+45}.$$

$$\bullet \frac{213}{497} = \frac{21-3}{49-7} = \frac{21+3}{49+7}.$$

$$\bullet \frac{213}{568} = \frac{21-3}{56-8} = \frac{21+3}{56+8}.$$

$$\bullet \frac{214}{856} = \frac{2-14}{8-56} = \frac{2+14}{8+56}.$$

$$\bullet \frac{214}{963} = \frac{2-14}{9-63} = \frac{2+14}{9+63}.$$

$$\bullet \frac{215}{430} = \frac{2-15}{4-30} = \frac{2+15}{4+30}.$$

$$\bullet \frac{215}{860} = \frac{2-15}{8-60} = \frac{2+15}{8+60}.$$

$$\bullet \frac{216}{540} = \frac{2-16}{5-40} = \frac{2+16}{5+40}.$$

$$\bullet \frac{218}{436} = \frac{2-18}{4-36} = \frac{2+18}{4+36}.$$

$$\bullet \frac{218}{654} = \frac{2-18}{6-54} = \frac{2+18}{6+54}.$$

$$\bullet \frac{218}{763} = \frac{2-18}{7-63} = \frac{2+18}{7+63}.$$

$$\bullet \frac{219}{438} = \frac{2-19}{4-38} = \frac{2+19}{4+38}.$$

$$\bullet \frac{219}{657} = \frac{2-19}{6-57} = \frac{2+19}{6+57}.$$

$$\bullet \frac{219}{876} = \frac{2-19}{8-76} = \frac{2+19}{8+76}.$$

$$\bullet \frac{235}{470} = \frac{2-35}{4-70} = \frac{2+35}{4+70}.$$

$$\bullet \frac{236}{590} = \frac{2-36}{5-90} = \frac{2+36}{5+90}.$$

$$\bullet \frac{238}{476} = \frac{2-38}{4-76} = \frac{2+38}{4+76}.$$

$$\bullet \frac{239}{478} = \frac{2-39}{4-78} = \frac{2+39}{4+78}.$$

$$\bullet \frac{243}{567} = \frac{24-3}{56-7} = \frac{24+3}{56+7}.$$

$$\bullet \frac{254}{381} = \frac{2-54}{3-81} = \frac{2+54}{3+81}.$$

$$\bullet \frac{256}{384} = \frac{2-56}{3-84} = \frac{2+56}{3+84}.$$

$$\bullet \frac{261}{783} = \frac{26-1}{78-3} = \frac{26+1}{78+3}.$$

$$\bullet \frac{263}{789} = \frac{26-3}{78-9} = \frac{26+3}{78+9}.$$

$$\bullet \frac{273}{546} = \frac{27-3}{54-6} = \frac{27+3}{54+6}.$$

$$\bullet \frac{273}{819} = \frac{27-3}{81-9} = \frac{27+3}{81+9}.$$

$$\bullet \frac{284}{639} = \frac{28-4}{63-9} = \frac{28+4}{63+9}.$$

$$\bullet \frac{287}{369} = \frac{28-7}{36-9} = \frac{28+7}{36+9}.$$

$$\bullet \frac{291}{873} = \frac{29-1}{87-3} = \frac{29+1}{87+3}.$$

$$\bullet \frac{293}{586} = \frac{29-3}{58-6} = \frac{29+3}{58+6}.$$

$$\bullet \frac{305}{427} = \frac{30-5}{42-7} = \frac{30+5}{42+7}.$$

• $\frac{306}{459} = \frac{30-6}{45-9} = \frac{30+6}{45+9}$ .	• $\frac{342}{798} = \frac{3-42}{7-98} = \frac{3+42}{7+98}$ .	• $\frac{391}{782} = \frac{39-1}{78-2} = \frac{39+1}{78+2}$ .
• $\frac{315}{420} = \frac{3-15}{4-20} = \frac{3+15}{4+20}$ .	• $\frac{345}{690} = \frac{3-45}{6-90} = \frac{3+45}{6+90}$ .	• $\frac{392}{784} = \frac{39-2}{78-4} = \frac{39+2}{78+4}$ .
• $\frac{315}{840} = \frac{3-15}{8-40} = \frac{3+15}{8+40}$ .	• $\frac{346}{519} = \frac{34-6}{51-9} = \frac{34+6}{51+9}$ .	• $\frac{396}{528} = \frac{39-6}{52-8} = \frac{39+6}{52+8}$ .
• $\frac{316}{948} = \frac{3-16}{9-48} = \frac{3+16}{9+48}$ .	• $\frac{351}{468} = \frac{3-51}{4-68} = \frac{3+51}{4+68}$ .	• $\frac{405}{729} = \frac{40-5}{72-9} = \frac{40+5}{72+9}$ .
• $\frac{318}{742} = \frac{3-18}{7-42} = \frac{3+18}{7+42}$ .	• $\frac{351}{702} = \frac{35-1}{70-2} = \frac{35+1}{70+2}$ .	• $\frac{415}{830} = \frac{4-15}{8-30} = \frac{4+15}{8+30}$ .
• $\frac{318}{954} = \frac{3-18}{9-54} = \frac{3+18}{9+54}$ .	• $\frac{352}{704} = \frac{35-2}{70-4} = \frac{35+2}{70+4}$ .	• $\frac{416}{520} = \frac{4-16}{5-20} = \frac{4+16}{5+20}$ .
• $\frac{321}{749} = \frac{3-21}{7-49} = \frac{3+21}{7+49}$ .	• $\frac{354}{708} = \frac{35-4}{70-8} = \frac{35+4}{70+8}$ .	• $\frac{416}{728} = \frac{4-16}{7-28} = \frac{4+16}{7+28}$ .
• $\frac{321}{856} = \frac{3-21}{8-56} = \frac{3+21}{8+56}$ .	• $\frac{357}{408} = \frac{35-7}{40-8} = \frac{35+7}{40+8}$ .	• $\frac{416}{832} = \frac{4-16}{8-32} = \frac{4+16}{8+32}$ .
• $\frac{324}{567} = \frac{32-4}{56-7} = \frac{32+4}{56+7}$ .	• $\frac{362}{905} = \frac{36-2}{90-5} = \frac{36+2}{90+5}$ .	• $\frac{418}{627} = \frac{4-18}{6-27} = \frac{4+18}{6+27}$ .
• $\frac{324}{756} = \frac{3-24}{7-56} = \frac{3+24}{7+56}$ .	• $\frac{364}{728} = \frac{36-4}{72-8} = \frac{36+4}{72+8}$ .	• $\frac{420}{735} = \frac{4-20}{7-35} = \frac{4+20}{7+35}$ .
• $\frac{326}{489} = \frac{32-6}{48-9} = \frac{32+6}{48+9}$ .	• $\frac{364}{819} = \frac{36-4}{81-9} = \frac{36+4}{81+9}$ .	• $\frac{423}{705} = \frac{42-3}{70-5} = \frac{42+3}{70+5}$ .
• $\frac{326}{978} = \frac{3-26}{9-78} = \frac{3+26}{9+78}$ .	• $\frac{372}{496} = \frac{3-72}{4-96} = \frac{3+72}{4+96}$ .	• $\frac{423}{987} = \frac{42-3}{98-7} = \frac{42+3}{98+7}$ .
• $\frac{327}{654} = \frac{3-27}{6-54} = \frac{3+27}{6+54}$ .	• $\frac{381}{762} = \frac{38-1}{76-2} = \frac{38+1}{76+2}$ .	• $\frac{428}{963} = \frac{4-28}{9-63} = \frac{4+28}{9+63}$ .
• $\frac{327}{981} = \frac{3-27}{9-81} = \frac{3+27}{9+81}$ .	• $\frac{382}{764} = \frac{38-2}{76-4} = \frac{38+2}{76+4}$ .	• $\frac{432}{756} = \frac{4-32}{7-56} = \frac{4+32}{7+56}$ .
• $\frac{329}{658} = \frac{3-29}{6-58} = \frac{3+29}{6+58}$ .	• $\frac{384}{576} = \frac{38-4}{57-6} = \frac{38+4}{57+6}$ .	• $\frac{435}{870} = \frac{4-35}{8-70} = \frac{4+35}{8+70}$ .
• $\frac{342}{570} = \frac{3-42}{5-70} = \frac{3+42}{5+70}$ .	• $\frac{386}{579} = \frac{38-6}{57-9} = \frac{38+6}{57+9}$ .	• $\frac{436}{872} = \frac{4-36}{8-72} = \frac{4+36}{8+72}$ .
		• $\frac{436}{981} = \frac{4-36}{9-81} = \frac{4+36}{9+81}$ .

$$\bullet \frac{438}{657} = \frac{4 - 38}{6 - 57} = \frac{4 + 38}{6 + 57}.$$

$$\bullet \frac{451}{902} = \frac{45 - 1}{90 - 2} = \frac{45 + 1}{90 + 2}.$$

$$\bullet \frac{452}{678} = \frac{4 - 52}{6 - 78} = \frac{4 + 52}{6 + 78}.$$

$$\bullet \frac{452}{791} = \frac{4 - 52}{7 - 91} = \frac{4 + 52}{7 + 91}.$$

$$\bullet \frac{453}{906} = \frac{45 - 3}{90 - 6} = \frac{45 + 3}{90 + 6}.$$

$$\bullet \frac{456}{798} = \frac{4 - 56}{7 - 98} = \frac{4 + 56}{7 + 98}.$$

$$\bullet \frac{472}{590} = \frac{4 - 72}{5 - 90} = \frac{4 + 72}{5 + 90}.$$

$$\bullet \frac{481}{962} = \frac{48 - 1}{96 - 2} = \frac{48 + 1}{96 + 2}.$$

$$\bullet \frac{486}{729} = \frac{48 - 6}{72 - 9} = \frac{48 + 6}{72 + 9}.$$

$$\bullet \frac{497}{568} = \frac{49 - 7}{56 - 8} = \frac{49 + 7}{56 + 8}.$$

$$\bullet \frac{513}{684} = \frac{51 - 3}{68 - 4} = \frac{51 + 3}{68 + 4}.$$

$$\bullet \frac{520}{936} = \frac{5 - 20}{9 - 36} = \frac{5 + 20}{9 + 36}.$$

$$\bullet \frac{524}{786} = \frac{52 - 4}{78 - 6} = \frac{52 + 4}{78 + 6}.$$

$$\bullet \frac{524}{917} = \frac{52 - 4}{91 - 7} = \frac{52 + 4}{91 + 7}.$$

$$\bullet \frac{526}{789} = \frac{52 - 6}{78 - 9} = \frac{52 + 6}{78 + 9}.$$

$$\bullet \frac{530}{742} = \frac{5 - 30}{7 - 42} = \frac{5 + 30}{7 + 42}.$$

$$\bullet \frac{540}{972} = \frac{5 - 40}{9 - 72} = \frac{5 + 40}{9 + 72}.$$

$$\bullet \frac{542}{813} = \frac{54 - 2}{81 - 3} = \frac{54 + 2}{81 + 3}.$$

$$\bullet \frac{546}{728} = \frac{54 - 6}{72 - 8} = \frac{54 + 6}{72 + 8}.$$

$$\bullet \frac{546}{819} = \frac{54 - 6}{81 - 9} = \frac{54 + 6}{81 + 9}.$$

$$\bullet \frac{560}{784} = \frac{5 - 60}{7 - 84} = \frac{5 + 60}{7 + 84}.$$

$$\bullet \frac{562}{843} = \frac{56 - 2}{84 - 3} = \frac{56 + 2}{84 + 3}.$$

$$\bullet \frac{564}{987} = \frac{56 - 4}{98 - 7} = \frac{56 + 4}{98 + 7}.$$

$$\bullet \frac{570}{684} = \frac{5 - 70}{6 - 84} = \frac{5 + 70}{6 + 84}.$$

$$\bullet \frac{605}{847} = \frac{60 - 5}{84 - 7} = \frac{60 + 5}{84 + 7}.$$

$$\bullet \frac{615}{820} = \frac{6 - 15}{8 - 20} = \frac{6 + 15}{8 + 20}.$$

$$\bullet \frac{618}{927} = \frac{6 - 18}{9 - 27} = \frac{6 + 18}{9 + 27}.$$

$$\bullet \frac{630}{945} = \frac{6 - 30}{9 - 45} = \frac{6 + 30}{9 + 45}.$$

$$\bullet \frac{632}{948} = \frac{6 - 32}{9 - 48} = \frac{6 + 32}{9 + 48}.$$

$$\bullet \frac{634}{951} = \frac{6 - 34}{9 - 51} = \frac{6 + 34}{9 + 51}.$$

$$\bullet \frac{637}{819} = \frac{63 - 7}{81 - 9} = \frac{63 + 7}{81 + 9}.$$

$$\bullet \frac{638}{957} = \frac{6 - 38}{9 - 57} = \frac{6 + 38}{9 + 57}.$$

$$\bullet \frac{639}{852} = \frac{6 - 39}{8 - 52} = \frac{6 + 39}{8 + 52}.$$

$$\bullet \frac{648}{729} = \frac{64 - 8}{72 - 9} = \frac{64 + 8}{72 + 9}.$$

$$\bullet \frac{648}{972} = \frac{6 - 48}{9 - 72} = \frac{6 + 48}{9 + 72}.$$

$$\bullet \frac{652}{978} = \frac{6 - 52}{9 - 78} = \frac{6 + 52}{9 + 78}.$$

$$\bullet \frac{654}{872} = \frac{6 - 54}{8 - 72} = \frac{6 + 54}{8 + 72}.$$

$$\bullet \frac{654}{981} = \frac{6 - 54}{9 - 81} = \frac{6 + 54}{9 + 81}.$$

$$\bullet \frac{705}{846} = \frac{70 - 5}{84 - 6} = \frac{70 + 5}{84 + 6}.$$

$$\bullet \frac{723}{964} = \frac{72 - 3}{96 - 4} = \frac{72 + 3}{96 + 4}.$$

$$\bullet \frac{724}{905} = \frac{72 - 4}{90 - 5} = \frac{72 + 4}{90 + 5}.$$

$$\bullet \frac{728}{936} = \frac{7 - 28}{9 - 36} = \frac{7 + 28}{9 + 36}.$$

$$\bullet \frac{735}{840} = \frac{7 - 35}{8 - 40} = \frac{7 + 35}{8 + 40}.$$

$$\bullet \frac{749}{856} = \frac{7 - 49}{8 - 56} = \frac{7 + 49}{8 + 56}.$$

$$\bullet \frac{763}{981} = \frac{7 - 63}{9 - 81} = \frac{7 + 63}{9 + 81}.$$

$$\bullet \frac{864}{972} = \frac{8 - 64}{9 - 72} = \frac{8 + 64}{9 + 72}.$$

#### 4.2.4 Seven Digits

- $\frac{201}{6834} = \frac{2-01}{68-34} = \frac{2+01}{68+34}$ .      •  $\frac{402}{7839} = \frac{4-02}{78-39} = \frac{4+02}{78+39}$ .      •  $\frac{510}{2346} = \frac{5-10}{23-46} = \frac{5+10}{23+46}$ .
- $\frac{201}{7638} = \frac{2-01}{76-38} = \frac{2+01}{76+38}$ .      •  $\frac{403}{6851} = \frac{4-03}{68-51} = \frac{4+03}{68+51}$ .      •  $\frac{510}{3264} = \frac{5-10}{32-64} = \frac{5+10}{32+64}$ .
- $\frac{201}{7839} = \frac{2-01}{78-39} = \frac{2+01}{78+39}$ .      •  $\frac{403}{9672} = \frac{4-03}{96-72} = \frac{4+03}{96+72}$ .      •  $\frac{510}{3468} = \frac{5-10}{34-68} = \frac{5+10}{34+68}$ .
- $\frac{201}{8643} = \frac{2-01}{86-43} = \frac{2+01}{86+43}$ .      •  $\frac{410}{3895} = \frac{4-10}{38-95} = \frac{4+10}{38+95}$ .      •  $\frac{510}{3672} = \frac{5-10}{36-72} = \frac{5+10}{36+72}$ .
- $\frac{201}{9648} = \frac{2-01}{96-48} = \frac{2+01}{96+48}$ .      •  $\frac{413}{2065} = \frac{4-13}{20-65} = \frac{4+13}{20+65}$ .      •  $\frac{510}{3876} = \frac{5-10}{38-76} = \frac{5+10}{38+76}$ .
- $\frac{301}{7826} = \frac{3-01}{78-26} = \frac{3+01}{78+26}$ .      •  $\frac{417}{2085} = \frac{4-17}{20-85} = \frac{4+17}{20+85}$ .      •  $\frac{510}{3978} = \frac{5-10}{39-78} = \frac{5+10}{39+78}$ .
- $\frac{301}{8729} = \frac{3-01}{87-29} = \frac{3+01}{87+29}$ .      •  $\frac{420}{1365} = \frac{4-20}{13-65} = \frac{4+20}{13+65}$ .      •  $\frac{510}{4386} = \frac{5-10}{43-86} = \frac{5+10}{43+86}$ .
- $\frac{302}{8154} = \frac{3-02}{81-54} = \frac{3+02}{81+54}$ .      •  $\frac{420}{1785} = \frac{4-20}{17-85} = \frac{4+20}{17+85}$ .      •  $\frac{510}{4692} = \frac{5-10}{46-92} = \frac{5+10}{46+92}$ .
- $\frac{302}{8456} = \frac{3-02}{84-56} = \frac{3+02}{84+56}$ .      •  $\frac{421}{3789} = \frac{42-1}{378-9} = \frac{42+1}{378+9}$ .      •  $\frac{512}{4096} = \frac{5-12}{40-96} = \frac{5+12}{40+96}$ .
- $\frac{352}{1408} = \frac{35-2}{140-8} = \frac{35+2}{140+8}$ .      •  $\frac{431}{2586} = \frac{43-1}{258-6} = \frac{43+1}{258+6}$ .      •  $\frac{517}{2068} = \frac{5-17}{20-68} = \frac{5+17}{20+68}$ .
- $\frac{371}{2968} = \frac{37-1}{296-8} = \frac{37+1}{296+8}$ .      •  $\frac{438}{1095} = \frac{4-38}{10-95} = \frac{4+38}{10+95}$ .      •  $\frac{519}{2076} = \frac{5-19}{20-76} = \frac{5+19}{20+76}$ .
- $\frac{392}{1568} = \frac{39-2}{156-8} = \frac{39+2}{156+8}$ .      •  $\frac{451}{2706} = \frac{45-1}{270-6} = \frac{45+1}{270+6}$ .      •  $\frac{520}{1768} = \frac{5-20}{17-68} = \frac{5+20}{17+68}$ .
- $\frac{402}{3618} = \frac{4-02}{36-18} = \frac{4+02}{36+18}$ .      •  $\frac{451}{3608} = \frac{45-1}{360-8} = \frac{45+1}{360+8}$ .      •  $\frac{520}{1976} = \frac{5-20}{19-76} = \frac{5+20}{19+76}$ .
- $\frac{402}{3819} = \frac{4-02}{38-19} = \frac{4+02}{38+19}$ .      •  $\frac{453}{1208} = \frac{45-3}{120-8} = \frac{45+3}{120+8}$ .      •  $\frac{521}{3647} = \frac{52-1}{364-7} = \frac{52+1}{364+7}$ .
- $\frac{402}{7638} = \frac{4-02}{76-38} = \frac{4+02}{76+38}$ .      •  $\frac{461}{2305} = \frac{46-1}{230-5} = \frac{46+1}{230+5}$ .      •  $\frac{521}{4689} = \frac{52-1}{468-9} = \frac{52+1}{468+9}$ .

$$\bullet \frac{538}{1076} = \frac{5 - 38}{10 - 76} = \frac{5 + 38}{10 + 76}.$$

$$\bullet \frac{602}{5719} = \frac{6 - 02}{57 - 19} = \frac{6 + 02}{57 + 19}.$$

$$\bullet \frac{627}{1045} = \frac{6 - 27}{10 - 45} = \frac{6 + 27}{10 + 45}.$$

$$\bullet \frac{539}{1078} = \frac{5 - 39}{10 - 78} = \frac{5 + 39}{10 + 78}.$$

$$\bullet \frac{603}{2814} = \frac{6 - 03}{28 - 14} = \frac{6 + 03}{28 + 14}.$$

$$\bullet \frac{628}{1570} = \frac{6 - 28}{15 - 70} = \frac{6 + 28}{15 + 70}.$$

$$\bullet \frac{540}{1296} = \frac{5 - 40}{12 - 96} = \frac{5 + 40}{12 + 96}.$$

$$\bullet \frac{603}{5427} = \frac{6 - 03}{54 - 27} = \frac{6 + 03}{54 + 27}.$$

$$\bullet \frac{630}{1785} = \frac{6 - 30}{17 - 85} = \frac{6 + 30}{17 + 85}.$$

$$\bullet \frac{542}{1897} = \frac{54 - 2}{189 - 7} = \frac{54 + 2}{189 + 7}.$$

$$\bullet \frac{603}{5829} = \frac{6 - 03}{58 - 29} = \frac{6 + 03}{58 + 29}.$$

$$\bullet \frac{631}{5048} = \frac{63 - 1}{504 - 8} = \frac{63 + 1}{504 + 8}.$$

$$\bullet \frac{543}{1267} = \frac{54 - 3}{126 - 7} = \frac{54 + 3}{126 + 7}.$$

$$\bullet \frac{603}{8241} = \frac{6 - 03}{82 - 41} = \frac{6 + 03}{82 + 41}.$$

$$\bullet \frac{632}{1580} = \frac{6 - 32}{15 - 80} = \frac{6 + 32}{15 + 80}.$$

$$\bullet \frac{543}{1629} = \frac{54 - 3}{162 - 9} = \frac{54 + 3}{162 + 9}.$$

$$\bullet \frac{604}{1359} = \frac{60 - 4}{135 - 9} = \frac{60 + 4}{135 + 9}.$$

$$\bullet \frac{635}{1270} = \frac{6 - 35}{12 - 70} = \frac{6 + 35}{12 + 70}.$$

$$\bullet \frac{546}{1092} = \frac{5 - 46}{10 - 92} = \frac{5 + 46}{10 + 92}.$$

$$\bullet \frac{604}{2718} = \frac{6 - 04}{27 - 18} = \frac{6 + 04}{27 + 18}.$$

$$\bullet \frac{639}{1278} = \frac{6 - 39}{12 - 78} = \frac{6 + 39}{12 + 78}.$$

$$\bullet \frac{548}{1096} = \frac{5 - 48}{10 - 96} = \frac{5 + 48}{10 + 96}.$$

$$\bullet \frac{604}{5738} = \frac{6 - 04}{57 - 38} = \frac{6 + 04}{57 + 38}.$$

$$\bullet \frac{641}{3205} = \frac{64 - 1}{320 - 5} = \frac{64 + 1}{320 + 5}.$$

$$\bullet \frac{561}{3927} = \frac{56 - 1}{392 - 7} = \frac{56 + 1}{392 + 7}.$$

$$\bullet \frac{604}{7852} = \frac{6 - 04}{78 - 52} = \frac{6 + 04}{78 + 52}.$$

$$\bullet \frac{645}{1290} = \frac{6 - 45}{12 - 90} = \frac{6 + 45}{12 + 90}.$$

$$\bullet \frac{562}{1304} = \frac{65 - 2}{130 - 4} = \frac{65 + 2}{130 + 4}.$$

$$\bullet \frac{654}{1308} = \frac{65 - 4}{130 - 8} = \frac{65 + 4}{130 + 8}.$$

$$\bullet \frac{673}{2019} = \frac{67 - 3}{201 - 9} = \frac{67 + 3}{201 + 9}.$$

$$\bullet \frac{571}{3426} = \frac{57 - 1}{342 - 6} = \frac{57 + 1}{342 + 6}.$$

$$\bullet \frac{610}{2745} = \frac{6 - 10}{27 - 45} = \frac{6 + 10}{27 + 45}.$$

$$\bullet \frac{652}{1304} = \frac{65 - 2}{130 - 4} = \frac{65 + 2}{130 + 4}.$$

$$\bullet \frac{581}{4067} = \frac{58 - 1}{406 - 7} = \frac{58 + 1}{406 + 7}.$$

$$\bullet \frac{612}{3570} = \frac{6 - 12}{35 - 70} = \frac{6 + 12}{35 + 70}.$$

$$\bullet \frac{654}{1308} = \frac{65 - 4}{130 - 8} = \frac{65 + 4}{130 + 8}.$$

$$\bullet \frac{582}{1746} = \frac{58 - 2}{174 - 6} = \frac{58 + 2}{174 + 6}.$$

$$\bullet \frac{612}{3978} = \frac{6 - 12}{39 - 78} = \frac{6 + 12}{39 + 78}.$$

$$\bullet \frac{673}{2019} = \frac{67 - 3}{201 - 9} = \frac{67 + 3}{201 + 9}.$$

$$\bullet \frac{583}{1749} = \frac{58 - 3}{174 - 9} = \frac{58 + 3}{174 + 9}.$$

$$\bullet \frac{612}{4590} = \frac{6 - 12}{45 - 90} = \frac{6 + 12}{45 + 90}.$$

$$\bullet \frac{681}{2043} = \frac{68 - 1}{204 - 3} = \frac{68 + 1}{204 + 3}.$$

$$\bullet \frac{591}{2364} = \frac{59 - 1}{236 - 4} = \frac{59 + 1}{236 + 4}.$$

$$\bullet \frac{615}{2870} = \frac{6 - 15}{28 - 70} = \frac{6 + 15}{28 + 70}.$$

$$\bullet \frac{681}{3405} = \frac{68 - 1}{340 - 5} = \frac{68 + 1}{340 + 5}.$$

$$\bullet \frac{591}{4728} = \frac{59 - 1}{472 - 8} = \frac{59 + 1}{472 + 8}.$$

$$\bullet \frac{615}{3280} = \frac{6 - 15}{32 - 80} = \frac{6 + 15}{32 + 80}.$$

$$\bullet \frac{682}{1705} = \frac{68 - 2}{170 - 5} = \frac{68 + 2}{170 + 5}.$$

$$\bullet \frac{683}{2049} = \frac{68 - 3}{204 - 9} = \frac{68 + 3}{204 + 9}.$$

$$\bullet \frac{602}{5418} = \frac{6 - 02}{54 - 18} = \frac{6 + 02}{54 + 18}.$$

$$\bullet \frac{617}{3085} = \frac{6 - 17}{30 - 85} = \frac{6 + 17}{30 + 85}.$$

$$\bullet \frac{684}{1539} = \frac{68 - 4}{153 - 9} = \frac{68 + 4}{153 + 9}.$$

$$\bullet \frac{691}{2073} = \frac{69-1}{207-3} = \frac{69+1}{207+3}.$$

$$\bullet \frac{714}{2958} = \frac{7-14}{29-58} = \frac{7+14}{29+58}.$$

$$\bullet \frac{742}{1590} = \frac{7-42}{15-90} = \frac{7+42}{15+90}.$$

$$\bullet \frac{691}{4837} = \frac{69-1}{483-7} = \frac{69+1}{483+7}.$$

$$\bullet \frac{715}{2860} = \frac{7-15}{28-60} = \frac{7+15}{28+60}.$$

$$\bullet \frac{761}{3805} = \frac{76-1}{380-5} = \frac{76+1}{380+5}.$$

$$\bullet \frac{692}{1384} = \frac{69-2}{138-4} = \frac{69+2}{138+4}.$$

$$\bullet \frac{715}{4290} = \frac{7-15}{42-90} = \frac{7+15}{42+90}.$$

$$\bullet \frac{762}{1905} = \frac{76-2}{190-5} = \frac{76+2}{190+5}.$$

$$\bullet \frac{702}{3159} = \frac{70-2}{315-9} = \frac{70+2}{315+9}.$$

$$\bullet \frac{716}{3580} = \frac{7-16}{35-80} = \frac{7+16}{35+80}.$$

$$\bullet \frac{762}{3048} = \frac{76-2}{304-8} = \frac{76+2}{304+8}.$$

$$\bullet \frac{702}{6318} = \frac{7-02}{63-18} = \frac{7+02}{63+18}.$$

$$\bullet \frac{718}{3590} = \frac{7-18}{35-90} = \frac{7+18}{35+90}.$$

$$\bullet \frac{764}{1528} = \frac{76-4}{152-8} = \frac{76+4}{152+8}.$$

$$\bullet \frac{703}{4218} = \frac{7-03}{42-18} = \frac{7+03}{42+18}.$$

$$\bullet \frac{721}{3605} = \frac{72-1}{360-5} = \frac{72+1}{360+5}.$$

$$\bullet \frac{781}{3905} = \frac{78-1}{390-5} = \frac{78+1}{390+5}.$$

$$\bullet \frac{703}{4921} = \frac{7-03}{49-21} = \frac{7+03}{49+21}.$$

$$\bullet \frac{721}{6489} = \frac{72-1}{648-9} = \frac{72+1}{648+9}.$$

$$\bullet \frac{782}{1564} = \frac{78-2}{156-4} = \frac{78+2}{156+4}.$$

$$\bullet \frac{703}{5624} = \frac{7-03}{56-24} = \frac{7+03}{56+24}.$$

$$\bullet \frac{724}{1086} = \frac{72-4}{108-6} = \frac{72+4}{108+6}.$$

$$\bullet \frac{782}{3519} = \frac{78-2}{351-9} = \frac{78+2}{351+9}.$$

$$\bullet \frac{703}{9842} = \frac{7-03}{98-42} = \frac{7+03}{98+42}.$$

$$\bullet \frac{726}{1089} = \frac{72-6}{108-9} = \frac{72+6}{108+9}.$$

$$\bullet \frac{791}{6328} = \frac{79-1}{632-8} = \frac{79+1}{632+8}.$$

$$\bullet \frac{704}{2816} = \frac{7-04}{28-16} = \frac{7+04}{28+16}.$$

$$\bullet \frac{728}{1456} = \frac{7-28}{14-56} = \frac{7+28}{14+56}.$$

$$\bullet \frac{792}{1584} = \frac{79-2}{158-4} = \frac{79+2}{158+4}.$$

$$\bullet \frac{704}{5632} = \frac{7-04}{56-32} = \frac{7+04}{56+32}.$$

$$\bullet \frac{728}{1560} = \frac{7-28}{15-60} = \frac{7+28}{15+60}.$$

$$\bullet \frac{792}{3168} = \frac{79-2}{316-8} = \frac{79+2}{316+8}.$$

$$\bullet \frac{704}{9152} = \frac{7-04}{91-52} = \frac{7+04}{91+52}.$$

$$\bullet \frac{729}{1458} = \frac{7-29}{14-58} = \frac{7+29}{14+58}.$$

$$\bullet \frac{793}{1586} = \frac{79-3}{158-6} = \frac{79+3}{158+6}.$$

$$\bullet \frac{704}{9856} = \frac{7-04}{98-56} = \frac{7+04}{98+56}.$$

$$\bullet \frac{735}{1260} = \frac{7-35}{12-60} = \frac{7+35}{12+60}.$$

$$\bullet \frac{802}{5614} = \frac{8-02}{56-14} = \frac{8+02}{56+14}.$$

$$\bullet \frac{705}{1269} = \frac{70-5}{126-9} = \frac{70+5}{126+9}.$$

$$\bullet \frac{735}{1680} = \frac{7-35}{16-80} = \frac{7+35}{16+80}.$$

$$\bullet \frac{803}{5621} = \frac{8-03}{56-21} = \frac{8+03}{56+21}.$$

$$\bullet \frac{712}{3560} = \frac{7-12}{35-60} = \frac{7+12}{35+60}.$$

$$\bullet \frac{735}{1890} = \frac{7-35}{18-90} = \frac{7+35}{18+90}.$$

$$\bullet \frac{804}{2613} = \frac{8-04}{26-13} = \frac{8+04}{26+13}.$$

$$\bullet \frac{714}{2856} = \frac{7-14}{28-56} = \frac{7+14}{28+56}.$$

$$\bullet \frac{741}{5928} = \frac{74-1}{592-8} = \frac{74+1}{592+8}.$$

$$\bullet \frac{804}{3216} = \frac{8-04}{32-16} = \frac{8+04}{32+16}.$$

$$\bullet \frac{804}{6231} = \frac{8-04}{62-31} = \frac{8+04}{62+31}.$$

$$\bullet \frac{819}{2457} = \frac{8-19}{24-57} = \frac{8+19}{24+57}.$$

$$\bullet \frac{852}{1704} = \frac{85-2}{170-4} = \frac{85+2}{170+4}.$$

$$\bullet \frac{804}{7236} = \frac{8-04}{72-36} = \frac{8+04}{72+36}.$$

$$\bullet \frac{819}{3276} = \frac{8-19}{32-76} = \frac{8+19}{32+76}.$$

$$\bullet \frac{853}{1706} = \frac{85-3}{170-6} = \frac{85+3}{170+6}.$$

$$\bullet \frac{806}{5239} = \frac{8-06}{52-39} = \frac{8+06}{52+39}.$$

$$\bullet \frac{820}{1435} = \frac{8-20}{14-35} = \frac{8+20}{14+35}.$$

$$\bullet \frac{861}{4305} = \frac{86-1}{430-5} = \frac{86+1}{430+5}.$$

$$\bullet \frac{806}{7254} = \frac{8-06}{72-54} = \frac{8+06}{72+54}.$$

$$\bullet \frac{824}{1957} = \frac{8-24}{19-57} = \frac{8+24}{19+57}.$$

$$\bullet \frac{862}{3017} = \frac{86-2}{301-7} = \frac{86+2}{301+7}.$$

$$\bullet \frac{807}{5649} = \frac{8-07}{56-49} = \frac{8+07}{56+49}.$$

$$\bullet \frac{827}{1654} = \frac{8-27}{16-54} = \frac{8+27}{16+54}.$$

$$\bullet \frac{873}{2619} = \frac{87-3}{261-9} = \frac{87+3}{261+9}.$$

$$\bullet \frac{810}{3645} = \frac{8-10}{36-45} = \frac{8+10}{36+45}.$$

$$\bullet \frac{830}{1245} = \frac{8-30}{12-45} = \frac{8+30}{12+45}.$$

$$\bullet \frac{876}{1095} = \frac{8-76}{10-95} = \frac{8+76}{10+95}.$$

$$\bullet \frac{810}{7695} = \frac{8-10}{76-95} = \frac{8+10}{76+95}.$$

$$\bullet \frac{832}{1456} = \frac{8-32}{14-56} = \frac{8+32}{14+56}.$$

$$\bullet \frac{891}{2673} = \frac{89-1}{267-3} = \frac{89+1}{267+3}.$$

$$\bullet \frac{812}{3045} = \frac{8-12}{30-45} = \frac{8+12}{30+45}.$$

$$\bullet \frac{832}{1560} = \frac{8-32}{15-60} = \frac{8+32}{15+60}.$$

$$\bullet \frac{891}{3564} = \frac{89-1}{356-4} = \frac{89+1}{356+4}.$$

$$\bullet \frac{812}{3654} = \frac{8-12}{36-54} = \frac{8+12}{36+54}.$$

$$\bullet \frac{832}{1976} = \frac{8-32}{19-76} = \frac{8+32}{19+76}.$$

$$\bullet \frac{891}{5346} = \frac{89-1}{534-6} = \frac{89+1}{534+6}.$$

$$\bullet \frac{813}{4065} = \frac{8-13}{40-65} = \frac{8+13}{40+65}.$$

$$\bullet \frac{835}{1670} = \frac{8-35}{16-70} = \frac{8+35}{16+70}.$$

$$\bullet \frac{891}{6237} = \frac{89-1}{623-7} = \frac{89+1}{623+7}.$$

$$\bullet \frac{814}{2035} = \frac{8-14}{20-35} = \frac{8+14}{20+35}.$$

$$\bullet \frac{836}{1045} = \frac{8-36}{10-45} = \frac{8+36}{10+45}.$$

$$\bullet \frac{902}{3157} = \frac{90-2}{315-7} = \frac{90+2}{315+7}.$$

$$\bullet \frac{814}{3256} = \frac{8-14}{32-56} = \frac{8+14}{32+56}.$$

$$\bullet \frac{836}{1254} = \frac{8-36}{12-54} = \frac{8+36}{12+54}.$$

$$\bullet \frac{902}{6314} = \frac{9-02}{63-14} = \frac{9+02}{63+14}.$$

$$\bullet \frac{815}{3260} = \frac{8-15}{32-60} = \frac{8+15}{32+60}.$$

$$\bullet \frac{840}{1365} = \frac{8-40}{13-65} = \frac{8+40}{13+65}.$$

$$\bullet \frac{903}{4816} = \frac{9-03}{48-16} = \frac{9+03}{48+16}.$$

$$\bullet \frac{816}{2754} = \frac{8-16}{27-54} = \frac{8+16}{27+54}.$$

$$\bullet \frac{841}{7569} = \frac{84-1}{756-9} = \frac{84+1}{756+9}.$$

$$\bullet \frac{903}{5418} = \frac{9-03}{54-18} = \frac{9+03}{54+18}.$$

$$\bullet \frac{816}{3570} = \frac{8-16}{35-70} = \frac{8+16}{35+70}.$$

$$\bullet \frac{843}{1967} = \frac{84-3}{196-7} = \frac{84+3}{196+7}.$$

$$\bullet \frac{903}{7826} = \frac{9-03}{78-26} = \frac{9+03}{78+26}.$$

$$\bullet \frac{816}{4590} = \frac{8-16}{45-90} = \frac{8+16}{45+90}.$$

$$\bullet \frac{845}{1690} = \frac{8-45}{16-90} = \frac{8+45}{16+90}.$$

$$\bullet \frac{904}{1356} = \frac{90-4}{135-6} = \frac{90+4}{135+6}.$$

• $\frac{904}{6328} = \frac{9-04}{63-28} = \frac{9+04}{63+28}$ .	• $\frac{913}{5478} = \frac{9-13}{54-78} = \frac{9+13}{54+78}$ .	• $\frac{936}{1872} = \frac{9-36}{18-72} = \frac{9+36}{18+72}$ .
• $\frac{904}{8136} = \frac{9-04}{81-36} = \frac{9+04}{81+36}$ .	• $\frac{915}{4270} = \frac{9-15}{42-70} = \frac{9+15}{42+70}$ .	• $\frac{936}{2184} = \frac{9-36}{21-84} = \frac{9+36}{21+84}$ .
• $\frac{905}{1267} = \frac{90-5}{126-7} = \frac{90+5}{126+7}$ .	• $\frac{916}{2748} = \frac{9-16}{27-48} = \frac{9+16}{27+48}$ .	• $\frac{941}{6587} = \frac{94-1}{658-7} = \frac{94+1}{658+7}$ .
• $\frac{906}{2718} = \frac{9-06}{27-18} = \frac{9+06}{27+18}$ .	• $\frac{916}{4580} = \frac{9-16}{45-80} = \frac{9+16}{45+80}$ .	• $\frac{941}{7528} = \frac{94-1}{752-8} = \frac{94+1}{752+8}$ .
• $\frac{906}{4832} = \frac{9-06}{48-32} = \frac{9+06}{48+32}$ .	• $\frac{918}{2346} = \frac{9-18}{23-46} = \frac{9+18}{23+46}$ .	• $\frac{942}{1570} = \frac{9-42}{15-70} = \frac{9+42}{15+70}$ .
• $\frac{906}{5134} = \frac{9-06}{51-34} = \frac{9+06}{51+34}$ .	• $\frac{918}{2754} = \frac{9-18}{27-54} = \frac{9+18}{27+54}$ .	• $\frac{942}{3768} = \frac{94-2}{376-8} = \frac{94+2}{376+8}$ .
• $\frac{906}{5738} = \frac{9-06}{57-38} = \frac{9+06}{57+38}$ .	• $\frac{918}{3264} = \frac{9-18}{32-64} = \frac{9+18}{32+64}$ .	• $\frac{945}{1260} = \frac{9-45}{12-60} = \frac{9+45}{12+60}$ .
• $\frac{906}{7248} = \frac{9-06}{72-48} = \frac{9+06}{72+48}$ .	• $\frac{918}{3570} = \frac{9-18}{35-70} = \frac{9+18}{35+70}$ .	• $\frac{945}{1680} = \frac{9-45}{16-80} = \frac{9+45}{16+80}$ .
• $\frac{906}{7852} = \frac{9-06}{78-52} = \frac{9+06}{78+52}$ .	• $\frac{918}{3672} = \frac{9-18}{36-72} = \frac{9+18}{36+72}$ .	• $\frac{951}{3804} = \frac{95-1}{380-4} = \frac{95+1}{380+4}$ .
• $\frac{906}{8154} = \frac{9-06}{81-54} = \frac{9+06}{81+54}$ .	• $\frac{921}{4605} = \frac{92-1}{460-5} = \frac{92+1}{460+5}$ .	• $\frac{951}{7608} = \frac{95-1}{760-8} = \frac{95+1}{760+8}$ .
• $\frac{907}{3628} = \frac{9-07}{36-28} = \frac{9+07}{36+28}$ .	• $\frac{921}{7368} = \frac{92-1}{736-8} = \frac{92+1}{736+8}$ .	• $\frac{954}{1378} = \frac{9-54}{13-78} = \frac{9+54}{13+78}$ .
• $\frac{907}{8163} = \frac{9-07}{81-63} = \frac{9+07}{81+63}$ .	• $\frac{924}{1386} = \frac{92-4}{138-6} = \frac{92+4}{138+6}$ .	• $\frac{961}{4805} = \frac{96-1}{480-5} = \frac{96+1}{480+5}$ .
• $\frac{908}{7264} = \frac{9-08}{72-64} = \frac{9+08}{72+64}$ .	• $\frac{927}{1648} = \frac{9-27}{16-48} = \frac{9+27}{16+48}$ .	• $\frac{964}{1205} = \frac{96-4}{120-5} = \frac{96+4}{120+5}$ .
• $\frac{912}{4560} = \frac{9-12}{45-60} = \frac{9+12}{45+60}$ .	• $\frac{927}{1854} = \frac{9-27}{18-54} = \frac{9+27}{18+54}$ .	• $\frac{971}{5826} = \frac{97-1}{582-6} = \frac{97+1}{582+6}$ .
• $\frac{912}{6384} = \frac{9-12}{63-84} = \frac{9+12}{63+84}$ .	• $\frac{935}{1870} = \frac{9-35}{18-70} = \frac{9+35}{18+70}$ .	• $\frac{982}{1473} = \frac{98-2}{147-3} = \frac{98+2}{147+3}$ .

#### 4.2.5 Eight Digits

- $\frac{1092}{4368} = \frac{109-2}{436-8} = \frac{109+2}{436+8}$ .
- $\frac{1478}{2956} = \frac{1-478}{2-956} = \frac{1+478}{2+956}$ .
- $\frac{1638}{2457} = \frac{16-38}{24-57} = \frac{16+38}{24+57}$ .
- $\frac{1206}{7839} = \frac{12-06}{78-39} = \frac{12+06}{78+39}$ .
- $\frac{1482}{3705} = \frac{148-2}{370-5} = \frac{148+2}{370+5}$ .
- $\frac{1638}{4095} = \frac{16-38}{40-95} = \frac{16+38}{40+95}$ .
- $\frac{1208}{5436} = \frac{12-08}{54-36} = \frac{12+08}{54+36}$ .
- $\frac{1485}{2970} = \frac{1-485}{2-970} = \frac{1+485}{2+970}$ .
- $\frac{1640}{3895} = \frac{16-40}{38-95} = \frac{16+40}{38+95}$ .
- $\frac{1209}{4836} = \frac{1-209}{4-836} = \frac{1+209}{4+836}$ .
- $\frac{1520}{3648} = \frac{15-20}{36-48} = \frac{15+20}{36+48}$ .
- $\frac{1642}{7389} = \frac{164-2}{738-9} = \frac{164+2}{738+9}$ .
- $\frac{1209}{8463} = \frac{12-09}{84-63} = \frac{12+09}{84+63}$ .
- $\frac{1520}{6384} = \frac{15-20}{63-84} = \frac{15+20}{63+84}$ .
- $\frac{1645}{3290} = \frac{16-45}{32-90} = \frac{16+45}{32+90}$ .
- $\frac{1269}{3807} = \frac{1-269}{3-807} = \frac{1+269}{3+807}$ .
- $\frac{1530}{4692} = \frac{15-30}{46-92} = \frac{15+30}{46+92}$ .
- $\frac{1683}{5049} = \frac{168-3}{504-9} = \frac{168+3}{504+9}$ .
- $\frac{1309}{7854} = \frac{13-09}{78-54} = \frac{13+09}{78+54}$ .
- $\frac{1530}{4896} = \frac{15-30}{48-96} = \frac{15+30}{48+96}$ .
- $\frac{1728}{3456} = \frac{17-28}{34-56} = \frac{17+28}{34+56}$ .
- $\frac{1326}{4590} = \frac{13-26}{45-90} = \frac{13+26}{45+90}$ .
- $\frac{1546}{3092} = \frac{15-46}{30-92} = \frac{15+46}{30+92}$ .
- $\frac{1729}{3458} = \frac{17-29}{34-58} = \frac{17+29}{34+58}$ .
- $\frac{1384}{2076} = \frac{138-4}{207-6} = \frac{138+4}{207+6}$ .
- $\frac{1548}{3096} = \frac{15-48}{30-96} = \frac{15+48}{30+96}$ .
- $\frac{1734}{2856} = \frac{17-34}{28-56} = \frac{17+34}{28+56}$ .
- $\frac{1386}{2079} = \frac{138-6}{207-9} = \frac{138+6}{207+9}$ .
- $\frac{1584}{2376} = \frac{158-4}{237-6} = \frac{158+4}{237+6}$ .
- $\frac{1743}{2905} = \frac{174-3}{290-5} = \frac{174+3}{290+5}$ .
- $\frac{1386}{2079} = \frac{138-6}{207-9} = \frac{138+6}{207+9}$ .
- $\frac{1586}{2379} = \frac{158-6}{237-9} = \frac{158+6}{237+9}$ .
- $\frac{1763}{5289} = \frac{176-3}{528-9} = \frac{176+3}{528+9}$ .
- $\frac{1407}{5628} = \frac{14-07}{56-28} = \frac{14+07}{56+28}$ .
- $\frac{1586}{2379} = \frac{158-6}{237-9} = \frac{158+6}{237+9}$ .
- $\frac{1764}{3528} = \frac{176-4}{352-8} = \frac{176+4}{352+8}$ .
- $\frac{1407}{5829} = \frac{14-07}{58-29} = \frac{14+07}{58+29}$ .
- $\frac{1608}{5427} = \frac{16-08}{54-27} = \frac{16+08}{54+27}$ .
- $\frac{1782}{3564} = \frac{178-2}{356-4} = \frac{178+2}{356+4}$ .
- $\frac{1408}{5632} = \frac{14-08}{56-32} = \frac{14+08}{56+32}$ .
- $\frac{1609}{4827} = \frac{16-09}{48-27} = \frac{16+09}{48+27}$ .
- $\frac{1782}{5346} = \frac{178-2}{534-6} = \frac{178+2}{534+6}$ .
- $\frac{1428}{3570} = \frac{14-28}{35-70} = \frac{14+28}{35+70}$ .
- $\frac{1624}{3857} = \frac{16-24}{38-57} = \frac{16+24}{38+57}$ .
- $\frac{1792}{3584} = \frac{179-2}{358-4} = \frac{179+2}{358+4}$ .
- $\frac{1465}{2930} = \frac{1-465}{2-930} = \frac{1+465}{2+930}$ .
- $\frac{1632}{4590} = \frac{16-32}{45-90} = \frac{16+32}{45+90}$ .
- $\frac{1805}{3249} = \frac{180-5}{324-9} = \frac{180+5}{324+9}$ .

- $\frac{1809}{4623} = \frac{18-09}{46-23} = \frac{18+09}{46+23}$ .
- $\frac{1953}{2604} = \frac{195-3}{260-4} = \frac{195+3}{260+4}$ .
- $\frac{2179}{4358} = \frac{2-179}{4-358} = \frac{2+179}{4+358}$ .
- $\frac{1809}{6432} = \frac{18-09}{64-32} = \frac{18+09}{64+32}$ .
- $\frac{1983}{4627} = \frac{198-3}{462-7} = \frac{198+3}{462+7}$ .
- $\frac{2185}{4370} = \frac{2-185}{4-370} = \frac{2+185}{4+370}$ .
- $\frac{1827}{3045} = \frac{18-27}{30-45} = \frac{18+27}{30+45}$ .
- $\frac{2013}{4697} = \frac{201-3}{469-7} = \frac{201+3}{469+7}$ .
- $\frac{2309}{4618} = \frac{2-309}{4-618} = \frac{2+309}{4+618}$ .
- $\frac{1827}{3654} = \frac{18-27}{36-54} = \frac{18+27}{36+54}$ .
- $\frac{2015}{4836} = \frac{20-15}{48-36} = \frac{20+15}{48+36}$ .
- $\frac{2316}{5790} = \frac{2-316}{5-790} = \frac{2+316}{5+790}$ .
- $\frac{1830}{2745} = \frac{18-30}{27-45} = \frac{18+30}{27+45}$ .
- $\frac{2015}{8463} = \frac{20-15}{84-63} = \frac{20+15}{84+63}$ .
- $\frac{2358}{4716} = \frac{2-358}{4-716} = \frac{2+358}{4+716}$ .
- $\frac{1836}{2754} = \frac{18-36}{27-54} = \frac{18+36}{27+54}$ .
- $\frac{2036}{4581} = \frac{20-36}{45-81} = \frac{20+36}{45+81}$ .
- $\frac{2359}{4718} = \frac{2-359}{4-718} = \frac{2+359}{4+718}$ .
- $\frac{1836}{4590} = \frac{18-36}{45-90} = \frac{18+36}{45+90}$ .
- $\frac{2045}{3681} = \frac{20-45}{36-81} = \frac{20+45}{36+81}$ .
- $\frac{2364}{5910} = \frac{2-364}{5-910} = \frac{2+364}{5+910}$ .
- $\frac{1845}{3690} = \frac{18-45}{36-90} = \frac{18+45}{36+90}$ .
- $\frac{2091}{8364} = \frac{209-1}{836-4} = \frac{209+1}{836+4}$ .
- $\frac{2376}{5940} = \frac{2-376}{5-940} = \frac{2+376}{5+940}$ .
- $\frac{1852}{3704} = \frac{185-2}{370-4} = \frac{185+2}{370+4}$ .
- $\frac{2093}{4186} = \frac{209-3}{418-6} = \frac{209+3}{418+6}$ .
- $\frac{2384}{5960} = \frac{2-384}{5-960} = \frac{2+384}{5+960}$ .
- $\frac{1854}{2369} = \frac{18-54}{23-69} = \frac{18+54}{23+69}$ .
- $\frac{2091}{8364} = \frac{209-1}{836-4} = \frac{209+1}{836+4}$ .
- $\frac{2408}{5719} = \frac{24-08}{57-19} = \frac{24+08}{57+19}$ .
- $\frac{1854}{3296} = \frac{18-54}{32-96} = \frac{18+54}{32+96}$ .
- $\frac{2109}{8436} = \frac{2-109}{8-436} = \frac{2+109}{8+436}$ .
- $\frac{2416}{5738} = \frac{24-16}{57-38} = \frac{24+16}{57+38}$ .
- $\frac{1904}{2856} = \frac{190-4}{285-6} = \frac{190+4}{285+6}$ .
- $\frac{2148}{5370} = \frac{2-148}{5-370} = \frac{2+148}{5+370}$ .
- $\frac{2430}{7695} = \frac{24-30}{76-95} = \frac{24+30}{76+95}$ .
- $\frac{1908}{5724} = \frac{19-08}{57-24} = \frac{19+08}{57+24}$ .
- $\frac{2163}{5047} = \frac{216-3}{504-7} = \frac{216+3}{504+7}$ .
- $\frac{2438}{6095} = \frac{24-38}{60-95} = \frac{24+38}{60+95}$ .
- $\frac{1908}{7632} = \frac{19-08}{76-32} = \frac{19+08}{76+32}$ .
- $\frac{2164}{9738} = \frac{2-164}{9-738} = \frac{2+164}{9+738}$ .
- $\frac{2460}{3895} = \frac{24-60}{38-95} = \frac{24+60}{38+95}$ .
- $\frac{1927}{3854} = \frac{19-27}{38-54} = \frac{19+27}{38+54}$ .
- $\frac{2178}{4356} = \frac{2-178}{4-356} = \frac{2+178}{4+356}$ .
- $\frac{2476}{3095} = \frac{24-76}{30-95} = \frac{24+76}{30+95}$ .
- $\frac{1938}{2754} = \frac{19-38}{27-54} = \frac{19+38}{27+54}$ .
- $\frac{2178}{6534} = \frac{2-178}{6-534} = \frac{2+178}{6+534}$ .
- $\frac{2493}{5817} = \frac{249-3}{581-7} = \frac{249+3}{581+7}$ .
- $\frac{2574}{3861} = \frac{2-574}{3-861} = \frac{2+574}{3+861}$ .

- $\frac{2586}{3017} = \frac{258 - 6}{301 - 7} = \frac{258 + 6}{301 + 7}$ .     •  $\frac{3015}{9246} = \frac{30 - 15}{92 - 46} = \frac{30 + 15}{92 + 46}$ .     •  $\frac{3201}{7469} = \frac{3 - 201}{7 - 469} = \frac{3 + 201}{7 + 469}$ .
- $\frac{2613}{9045} = \frac{26 - 13}{90 - 45} = \frac{26 + 13}{90 + 45}$ .     •  $\frac{3015}{9648} = \frac{30 - 15}{96 - 48} = \frac{30 + 15}{96 + 48}$ .     •  $\frac{3208}{5614} = \frac{32 - 08}{56 - 14} = \frac{32 + 08}{56 + 14}$ .
- $\frac{2639}{5481} = \frac{26 - 39}{54 - 81} = \frac{26 + 39}{54 + 81}$ .     •  $\frac{3018}{4527} = \frac{30 - 18}{45 - 27} = \frac{30 + 18}{45 + 27}$ .     •  $\frac{3208}{7619} = \frac{32 - 08}{76 - 19} = \frac{32 + 08}{76 + 19}$ .
- $\frac{2673}{8019} = \frac{267 - 3}{801 - 9} = \frac{267 + 3}{801 + 9}$ .     •  $\frac{3024}{9576} = \frac{30 - 24}{95 - 76} = \frac{30 + 24}{95 + 76}$ .     •  $\frac{3209}{6418} = \frac{3 - 209}{6 - 418} = \frac{3 + 209}{6 + 418}$ .
- $\frac{2691}{8073} = \frac{269 - 1}{807 - 3} = \frac{269 + 1}{807 + 3}$ .     •  $\frac{3042}{6591} = \frac{30 - 42}{65 - 91} = \frac{30 + 42}{65 + 91}$ .     •  $\frac{3216}{7504} = \frac{3 - 216}{7 - 504} = \frac{3 + 216}{7 + 504}$ .
- $\frac{2705}{4869} = \frac{270 - 5}{486 - 9} = \frac{270 + 5}{486 + 9}$ .     •  $\frac{3065}{4291} = \frac{30 - 65}{42 - 91} = \frac{30 + 65}{42 + 91}$ .     •  $\frac{3216}{9045} = \frac{32 - 16}{90 - 45} = \frac{32 + 16}{90 + 45}$ .
- $\frac{2709}{4816} = \frac{27 - 09}{48 - 16} = \frac{27 + 09}{48 + 16}$ .     •  $\frac{3092}{6184} = \frac{309 - 2}{618 - 4} = \frac{309 + 2}{618 + 4}$ .     •  $\frac{3240}{7695} = \frac{32 - 40}{76 - 95} = \frac{32 + 40}{76 + 95}$ .
- $\frac{2718}{4530} = \frac{27 - 18}{45 - 30} = \frac{27 + 18}{45 + 30}$ .     •  $\frac{3096}{4128} = \frac{309 - 6}{412 - 8} = \frac{309 + 6}{412 + 8}$ .     •  $\frac{3249}{7581} = \frac{3 - 249}{7 - 581} = \frac{3 + 249}{7 + 581}$ .
- $\frac{2718}{5436} = \frac{27 - 18}{54 - 36} = \frac{27 + 18}{54 + 36}$ .     •  $\frac{3105}{4968} = \frac{310 - 5}{496 - 8} = \frac{310 + 5}{496 + 8}$ .     •  $\frac{3267}{9801} = \frac{3 - 267}{9 - 801} = \frac{3 + 267}{9 + 801}$ .
- $\frac{2719}{5438} = \frac{27 - 19}{54 - 38} = \frac{27 + 19}{54 + 38}$ .     •  $\frac{3162}{4590} = \frac{31 - 62}{45 - 90} = \frac{31 + 62}{45 + 90}$ .     •  $\frac{3276}{4095} = \frac{32 - 76}{40 - 95} = \frac{32 + 76}{40 + 95}$ .
- $\frac{2814}{7035} = \frac{28 - 14}{70 - 35} = \frac{28 + 14}{70 + 35}$ .     •  $\frac{3162}{7905} = \frac{316 - 2}{790 - 5} = \frac{316 + 2}{790 + 5}$ .     •  $\frac{3405}{6129} = \frac{340 - 5}{612 - 9} = \frac{340 + 5}{612 + 9}$ .
- $\frac{2817}{5634} = \frac{28 - 17}{56 - 34} = \frac{28 + 17}{56 + 34}$ .     •  $\frac{3168}{9504} = \frac{3 - 168}{9 - 504} = \frac{3 + 168}{9 + 504}$ .     •  $\frac{3408}{7952} = \frac{3 - 408}{7 - 952} = \frac{3 + 408}{7 + 952}$ .
- $\frac{2905}{3486} = \frac{290 - 5}{348 - 6} = \frac{290 + 5}{348 + 6}$ .     •  $\frac{3174}{5290} = \frac{3 - 174}{5 - 290} = \frac{3 + 174}{5 + 290}$ .     •  $\frac{3417}{5628} = \frac{34 - 17}{56 - 28} = \frac{34 + 17}{56 + 28}$ .
- $\frac{2917}{5834} = \frac{29 - 17}{58 - 34} = \frac{29 + 17}{58 + 34}$ .     •  $\frac{3176}{9528} = \frac{3 - 176}{9 - 528} = \frac{3 + 176}{9 + 528}$ .     •  $\frac{3417}{5829} = \frac{34 - 17}{58 - 29} = \frac{34 + 17}{58 + 29}$ .
- $\frac{2964}{3705} = \frac{296 - 4}{370 - 5} = \frac{296 + 4}{370 + 5}$ .     •  $\frac{3195}{4260} = \frac{3 - 195}{4 - 260} = \frac{3 + 195}{4 + 260}$ .     •  $\frac{3426}{5710} = \frac{3 - 426}{5 - 710} = \frac{3 + 426}{5 + 710}$ .
- $\frac{2964}{5187} = \frac{296 - 4}{518 - 7} = \frac{296 + 4}{518 + 7}$ .     •  $\frac{3198}{7462} = \frac{3 - 198}{7 - 462} = \frac{3 + 198}{7 + 462}$ .     •  $\frac{3485}{6970} = \frac{3 - 485}{6 - 970} = \frac{3 + 485}{6 + 970}$ .

- $\frac{3546}{7092} = \frac{35 - 46}{70 - 92} = \frac{35 + 46}{70 + 92}$ .
- $\frac{3642}{7891} = \frac{36 - 42}{78 - 91} = \frac{36 + 42}{78 + 91}$ .
- $\frac{3942}{6570} = \frac{39 - 42}{65 - 70} = \frac{39 + 42}{65 + 70}$ .
- $\frac{3548}{7096} = \frac{35 - 48}{70 - 96} = \frac{35 + 48}{70 + 96}$ .
- $\frac{3642}{9105} = \frac{364 - 2}{910 - 5} = \frac{364 + 2}{910 + 5}$ .
- $\frac{3965}{4270} = \frac{39 - 65}{42 - 70} = \frac{39 + 65}{42 + 70}$ .
- $\frac{3564}{7128} = \frac{356 - 4}{712 - 8} = \frac{356 + 4}{712 + 8}$ .
- $\frac{3645}{7290} = \frac{36 - 45}{72 - 90} = \frac{36 + 45}{72 + 90}$ .
- $\frac{4016}{9538} = \frac{40 - 16}{95 - 38} = \frac{40 + 16}{95 + 38}$ .
- $\frac{3564}{8019} = \frac{356 - 4}{801 - 9} = \frac{356 + 4}{801 + 9}$ .
- $\frac{3672}{4590} = \frac{36 - 72}{45 - 90} = \frac{36 + 72}{45 + 90}$ .
- $\frac{4032}{9576} = \frac{40 - 32}{95 - 76} = \frac{40 + 32}{95 + 76}$ .
- $\frac{3570}{4182} = \frac{35 - 70}{41 - 82} = \frac{35 + 70}{41 + 82}$ .
- $\frac{3678}{4291} = \frac{36 - 78}{42 - 91} = \frac{36 + 78}{42 + 91}$ .
- $\frac{4083}{9527} = \frac{408 - 3}{952 - 7} = \frac{408 + 3}{952 + 7}$ .
- $\frac{3570}{4692} = \frac{35 - 70}{46 - 92} = \frac{35 + 70}{46 + 92}$ .
- $\frac{3762}{9405} = \frac{376 - 2}{940 - 5} = \frac{376 + 2}{940 + 5}$ .
- $\frac{4105}{7389} = \frac{410 - 5}{738 - 9} = \frac{410 + 5}{738 + 9}$ .
- $\frac{3570}{4896} = \frac{35 - 70}{48 - 96} = \frac{35 + 70}{48 + 96}$ .
- $\frac{3816}{5724} = \frac{38 - 16}{57 - 24} = \frac{38 + 16}{57 + 24}$ .
- $\frac{4138}{6207} = \frac{4 - 138}{6 - 207} = \frac{4 + 138}{6 + 207}$ .
- $\frac{3580}{4296} = \frac{35 - 80}{42 - 96} = \frac{35 + 80}{42 + 96}$ .
- $\frac{3816}{9540} = \frac{38 - 16}{95 - 40} = \frac{38 + 16}{95 + 40}$ .
- $\frac{4158}{6237} = \frac{4 - 158}{6 - 237} = \frac{4 + 158}{6 + 237}$ .
- $\frac{3582}{7164} = \frac{358 - 2}{716 - 4} = \frac{358 + 2}{716 + 4}$ .
- $\frac{3819}{5427} = \frac{38 - 19}{54 - 27} = \frac{38 + 19}{54 + 27}$ .
- $\frac{4176}{8352} = \frac{4 - 176}{8 - 352} = \frac{4 + 176}{8 + 352}$ .
- $\frac{3592}{7184} = \frac{359 - 2}{718 - 4} = \frac{359 + 2}{718 + 4}$ .
- $\frac{3824}{9560} = \frac{38 - 24}{95 - 60} = \frac{38 + 24}{95 + 60}$ .
- $\frac{4190}{6285} = \frac{4 - 190}{6 - 285} = \frac{4 + 190}{6 + 285}$ .
- $\frac{3608}{5412} = \frac{36 - 08}{54 - 12} = \frac{36 + 08}{54 + 12}$ .
- $\frac{3842}{9605} = \frac{384 - 2}{960 - 5} = \frac{384 + 2}{960 + 5}$ .
- $\frac{4230}{9165} = \frac{42 - 30}{91 - 65} = \frac{42 + 30}{91 + 65}$ .
- $\frac{3609}{4812} = \frac{3 - 609}{4 - 812} = \frac{3 + 609}{4 + 812}$ .
- $\frac{3845}{7690} = \frac{38 - 45}{76 - 90} = \frac{38 + 45}{76 + 90}$ .
- $\frac{4235}{9680} = \frac{42 - 35}{96 - 80} = \frac{42 + 35}{96 + 80}$ .
- $\frac{3609}{8421} = \frac{36 - 09}{84 - 21} = \frac{36 + 09}{84 + 21}$ .
- $\frac{3876}{4590} = \frac{38 - 76}{45 - 90} = \frac{38 + 76}{45 + 90}$ .
- $\frac{4236}{9178} = \frac{42 - 36}{91 - 78} = \frac{42 + 36}{91 + 78}$ .
- $\frac{3618}{5427} = \frac{36 - 18}{54 - 27} = \frac{36 + 18}{54 + 27}$ .
- $\frac{3905}{6248} = \frac{390 - 5}{624 - 8} = \frac{390 + 5}{624 + 8}$ .
- $\frac{4239}{7065} = \frac{42 - 39}{70 - 65} = \frac{42 + 39}{70 + 65}$ .
- $\frac{3618}{9045} = \frac{36 - 18}{90 - 45} = \frac{36 + 18}{90 + 45}$ .
- $\frac{3906}{7812} = \frac{39 - 06}{78 - 12} = \frac{39 + 06}{78 + 12}$ .
- $\frac{4263}{7105} = \frac{426 - 3}{710 - 5} = \frac{426 + 3}{710 + 5}$ .
- $\frac{3620}{8145} = \frac{36 - 20}{81 - 45} = \frac{36 + 20}{81 + 45}$ .
- $\frac{3926}{8154} = \frac{39 - 26}{81 - 54} = \frac{39 + 26}{81 + 54}$ .
- $\frac{4296}{5370} = \frac{4 - 296}{5 - 370} = \frac{4 + 296}{5 + 370}$ .
- $\frac{4296}{7518} = \frac{4 - 296}{7 - 518} = \frac{4 + 296}{7 + 518}$ .

- $\frac{4356}{8712} = \frac{4 - 356}{8 - 712} = \frac{4 + 356}{8 + 712}$ .
- $\frac{4712}{5890} = \frac{4 - 712}{5 - 890} = \frac{4 + 712}{5 + 890}$ .
- $\frac{5310}{8496} = \frac{5 - 310}{8 - 496} = \frac{5 + 310}{8 + 496}$ .
- $\frac{4356}{9801} = \frac{4 - 356}{9 - 801} = \frac{4 + 356}{9 + 801}$ .
- $\frac{4728}{5319} = \frac{472 - 8}{531 - 9} = \frac{472 + 8}{531 + 9}$ .
- $\frac{5324}{7986} = \frac{532 - 4}{798 - 6} = \frac{532 + 4}{798 + 6}$ .
- $\frac{4512}{7896} = \frac{4 - 512}{7 - 896} = \frac{4 + 512}{7 + 896}$ .
- $\frac{4728}{5910} = \frac{4 - 728}{5 - 910} = \frac{4 + 728}{5 + 910}$ .
- $\frac{5327}{6849} = \frac{532 - 7}{684 - 9} = \frac{532 + 7}{684 + 9}$ .
- $\frac{4516}{7903} = \frac{4 - 516}{7 - 903} = \frac{4 + 516}{7 + 903}$ .
- $\frac{4736}{5920} = \frac{4 - 736}{5 - 920} = \frac{4 + 736}{5 + 920}$ .
- $\frac{5340}{9612} = \frac{5 - 340}{9 - 612} = \frac{5 + 340}{9 + 612}$ .
- $\frac{4516}{9032} = \frac{45 - 16}{90 - 32} = \frac{45 + 16}{90 + 32}$ .
- $\frac{4781}{9562} = \frac{478 - 1}{956 - 2} = \frac{478 + 1}{956 + 2}$ .
- $\frac{5346}{7128} = \frac{534 - 6}{712 - 8} = \frac{534 + 6}{712 + 8}$ .
- $\frac{4518}{9036} = \frac{45 - 18}{90 - 36} = \frac{45 + 18}{90 + 36}$ .
- $\frac{4815}{9630} = \frac{48 - 15}{96 - 30} = \frac{48 + 15}{96 + 30}$ .
- $\frac{5346}{8019} = \frac{534 - 6}{801 - 9} = \frac{534 + 6}{801 + 9}$ .
- $\frac{4520}{8136} = \frac{45 - 20}{81 - 36} = \frac{45 + 20}{81 + 36}$ .
- $\frac{4835}{9670} = \frac{48 - 35}{96 - 70} = \frac{48 + 35}{96 + 70}$ .
- $\frac{5390}{8624} = \frac{5 - 390}{8 - 624} = \frac{5 + 390}{8 + 624}$ .
- $\frac{4532}{6798} = \frac{4 - 532}{6 - 798} = \frac{4 + 532}{6 + 798}$ .
- $\frac{4837}{6219} = \frac{483 - 7}{621 - 9} = \frac{483 + 7}{621 + 9}$ .
- $\frac{5409}{7813} = \frac{54 - 09}{78 - 13} = \frac{54 + 09}{78 + 13}$ .
- $\frac{4536}{9072} = \frac{45 - 36}{90 - 72} = \frac{45 + 36}{90 + 72}$ .
- $\frac{4851}{9702} = \frac{485 - 1}{970 - 2} = \frac{485 + 1}{970 + 2}$ .
- $\frac{5410}{9738} = \frac{5 - 410}{9 - 738} = \frac{5 + 410}{9 + 738}$ .
- $\frac{4538}{9076} = \frac{45 - 38}{90 - 76} = \frac{45 + 38}{90 + 76}$ .
- $\frac{4853}{9706} = \frac{485 - 3}{970 - 6} = \frac{485 + 3}{970 + 6}$ .
- $\frac{5418}{6923} = \frac{54 - 18}{69 - 23} = \frac{54 + 18}{69 + 23}$ .
- $\frac{4563}{7098} = \frac{45 - 63}{70 - 98} = \frac{45 + 63}{70 + 98}$ .
- $\frac{5124}{8967} = \frac{512 - 4}{896 - 7} = \frac{512 + 4}{896 + 7}$ .
- $\frac{5418}{9632} = \frac{54 - 18}{96 - 32} = \frac{54 + 18}{96 + 32}$ .
- $\frac{4570}{6398} = \frac{45 - 70}{63 - 98} = \frac{45 + 70}{63 + 98}$ .
- $\frac{5164}{9037} = \frac{516 - 4}{903 - 7} = \frac{516 + 4}{903 + 7}$ .
- $\frac{5463}{7891} = \frac{54 - 63}{78 - 91} = \frac{54 + 63}{78 + 91}$ .
- $\frac{4615}{9230} = \frac{46 - 15}{92 - 30} = \frac{46 + 15}{92 + 30}$ .
- $\frac{5180}{9324} = \frac{5 - 180}{9 - 324} = \frac{5 + 180}{9 + 324}$ .
- $\frac{5463}{7891} = \frac{54 - 63}{78 - 91} = \frac{54 + 63}{78 + 91}$ .
- $\frac{4632}{5790} = \frac{4 - 632}{5 - 790} = \frac{4 + 632}{5 + 790}$ .
- $\frac{5210}{9378} = \frac{5 - 210}{9 - 378} = \frac{5 + 210}{9 + 378}$ .
- $\frac{5478}{6391} = \frac{54 - 78}{63 - 91} = \frac{54 + 78}{63 + 91}$ .
- $\frac{4635}{9270} = \frac{46 - 35}{92 - 70} = \frac{46 + 35}{92 + 70}$ .
- $\frac{5270}{9486} = \frac{5 - 270}{9 - 486} = \frac{5 + 270}{9 + 486}$ .
- $\frac{5481}{6293} = \frac{54 - 81}{62 - 93} = \frac{54 + 81}{62 + 93}$ .
- $\frac{4651}{9302} = \frac{465 - 1}{930 - 2} = \frac{465 + 1}{930 + 2}$ .
- $\frac{5290}{6348} = \frac{5 - 290}{6 - 348} = \frac{5 + 290}{6 + 348}$ .
- $\frac{5742}{8613} = \frac{574 - 2}{861 - 3} = \frac{574 + 2}{861 + 3}$ .
- $\frac{5810}{6972} = \frac{5 - 810}{6 - 972} = \frac{5 + 810}{6 + 972}$ .

- $\frac{6024}{9538} = \frac{60 - 24}{95 - 38} = \frac{60 + 24}{95 + 38}$ .      •  $\frac{6714}{8952} = \frac{6 - 714}{8 - 952} = \frac{6 + 714}{8 + 952}$ .      •  $\frac{7638}{9045} = \frac{76 - 38}{90 - 45} = \frac{76 + 38}{90 + 45}$ .
- $\frac{6093}{8124} = \frac{609 - 3}{812 - 4} = \frac{609 + 3}{812 + 4}$ .      •  $\frac{6810}{7945} = \frac{6 - 810}{7 - 945} = \frac{6 + 810}{7 + 945}$ .      •  $\frac{7836}{9142} = \frac{78 - 36}{91 - 42} = \frac{78 + 36}{91 + 42}$ .
- $\frac{6138}{9207} = \frac{6 - 138}{9 - 207} = \frac{6 + 138}{9 + 207}$ .      •  $\frac{7035}{8241} = \frac{70 - 35}{82 - 41} = \frac{70 + 35}{82 + 41}$ .      •  $\frac{7854}{9163} = \frac{78 - 54}{91 - 63} = \frac{78 + 54}{91 + 63}$ .
- $\frac{6158}{9237} = \frac{6 - 158}{9 - 237} = \frac{6 + 158}{9 + 237}$ .      •  $\frac{7035}{9246} = \frac{70 - 35}{92 - 46} = \frac{70 + 35}{92 + 46}$ .      •  $\frac{8035}{9642} = \frac{80 - 35}{96 - 42} = \frac{80 + 35}{96 + 42}$ .
- $\frac{6231}{9045} = \frac{62 - 31}{90 - 45} = \frac{62 + 31}{90 + 45}$ .      •  $\frac{7035}{9648} = \frac{70 - 35}{96 - 48} = \frac{70 + 35}{96 + 48}$ .      •  $\frac{8105}{9726} = \frac{810 - 5}{972 - 6} = \frac{810 + 5}{972 + 6}$ .
- $\frac{6237}{8019} = \frac{623 - 7}{801 - 9} = \frac{623 + 7}{801 + 9}$ .      •  $\frac{7045}{9863} = \frac{70 - 45}{98 - 63} = \frac{70 + 45}{98 + 63}$ .      •  $\frac{8106}{9457} = \frac{810 - 6}{945 - 7} = \frac{810 + 6}{945 + 7}$ .
- $\frac{6258}{7301} = \frac{6 - 258}{7 - 301} = \frac{6 + 258}{7 + 301}$ .      •  $\frac{7124}{8905} = \frac{712 - 4}{890 - 5} = \frac{712 + 4}{890 + 5}$ .      •  $\frac{8154}{9362} = \frac{81 - 54}{93 - 62} = \frac{81 + 54}{93 + 62}$ .
- $\frac{6309}{8412} = \frac{6 - 309}{8 - 412} = \frac{6 + 309}{8 + 412}$ .      •  $\frac{7146}{9528} = \frac{714 - 6}{952 - 8} = \frac{714 + 6}{952 + 8}$ .      •  $\frac{8472}{9531} = \frac{8 - 472}{9 - 531} = \frac{8 + 472}{9 + 531}$ .
- $\frac{6324}{7905} = \frac{632 - 4}{790 - 5} = \frac{632 + 4}{790 + 5}$ .      •  $\frac{7236}{9045} = \frac{72 - 36}{90 - 45} = \frac{72 + 36}{90 + 45}$ .      •  $\frac{301}{26789} = \frac{3 - 01}{267 - 89} = \frac{3 + 01}{267 + 89}$ .
- $\frac{6345}{9870} = \frac{63 - 45}{98 - 70} = \frac{63 + 45}{98 + 70}$ .      •  $\frac{7284}{9105} = \frac{728 - 4}{910 - 5} = \frac{728 + 4}{910 + 5}$ .      •  $\frac{302}{14798} = \frac{3 - 02}{147 - 98} = \frac{3 + 02}{147 + 98}$ .
- $\frac{6354}{9178} = \frac{63 - 54}{91 - 78} = \frac{63 + 54}{91 + 78}$ .      •  $\frac{7364}{9205} = \frac{736 - 4}{920 - 5} = \frac{736 + 4}{920 + 5}$ .      •  $\frac{401}{23659} = \frac{4 - 01}{236 - 59} = \frac{4 + 01}{236 + 59}$ .
- $\frac{6530}{9142} = \frac{65 - 30}{91 - 42} = \frac{65 + 30}{91 + 42}$ .      •  $\frac{7483}{9621} = \frac{7 - 483}{9 - 621} = \frac{7 + 483}{9 + 621}$ .      •  $\frac{401}{35689} = \frac{4 - 01}{356 - 89} = \frac{4 + 01}{356 + 89}$ .
- $\frac{6534}{8712} = \frac{6 - 534}{8 - 712} = \frac{6 + 534}{8 + 712}$ .      •  $\frac{7532}{9684} = \frac{7 - 532}{9 - 684} = \frac{7 + 532}{9 + 684}$ .      •  $\frac{401}{36892} = \frac{4 - 01}{368 - 92} = \frac{4 + 01}{368 + 92}$ .
- $\frac{6534}{9801} = \frac{6 - 534}{9 - 801} = \frac{6 + 534}{9 + 801}$ .      •  $\frac{7623}{9801} = \frac{7 - 623}{9 - 801} = \frac{7 + 623}{9 + 801}$ .      •  $\frac{402}{13869} = \frac{4 - 02}{138 - 69} = \frac{4 + 02}{138 + 69}$ .
- $\frac{6539}{7042} = \frac{65 - 39}{70 - 42} = \frac{65 + 39}{70 + 42}$ .      •  $\frac{7624}{9530} = \frac{76 - 24}{95 - 30} = \frac{76 + 24}{95 + 30}$ .      •  $\frac{402}{15678} = \frac{4 - 02}{156 - 78} = \frac{4 + 02}{156 + 78}$ .
- $\frac{6549}{8732} = \frac{6 - 549}{8 - 732} = \frac{6 + 549}{8 + 732}$ .      •  $\frac{7632}{9540} = \frac{76 - 32}{95 - 40} = \frac{76 + 32}{95 + 40}$ .      •  $\frac{402}{15879} = \frac{4 - 02}{158 - 79} = \frac{4 + 02}{158 + 79}$ .
- $\frac{6549}{8732} = \frac{6 - 549}{8 - 732} = \frac{6 + 549}{8 + 732}$ .      •  $\frac{7632}{9540} = \frac{76 - 32}{95 - 40} = \frac{76 + 32}{95 + 40}$ .      •  $\frac{402}{18693} = \frac{4 - 02}{186 - 93} = \frac{4 + 02}{186 + 93}$ .

- $\frac{403}{12896} = \frac{4 - 03}{128 - 96} = \frac{4 + 03}{128 + 96}$ .
- $\frac{701}{65894} = \frac{7 - 01}{658 - 94} = \frac{7 + 01}{658 + 94}$ .
- $\frac{802}{37694} = \frac{8 - 02}{376 - 94} = \frac{8 + 02}{376 + 94}$ .
- $\frac{601}{25843} = \frac{6 - 01}{258 - 43} = \frac{6 + 01}{258 + 43}$ .
- $\frac{702}{18954} = \frac{7 - 02}{189 - 54} = \frac{7 + 02}{189 + 54}$ .
- $\frac{804}{15276} = \frac{8 - 04}{152 - 76} = \frac{8 + 04}{152 + 76}$ .
- $\frac{601}{34257} = \frac{6 - 01}{342 - 57} = \frac{6 + 01}{342 + 57}$ .
- $\frac{703}{12654} = \frac{7 - 03}{126 - 54} = \frac{7 + 03}{126 + 54}$ .
- $\frac{806}{12493} = \frac{8 - 06}{124 - 93} = \frac{8 + 06}{124 + 93}$ .
- $\frac{601}{53489} = \frac{6 - 01}{534 - 89} = \frac{6 + 01}{534 + 89}$ .
- $\frac{703}{19684} = \frac{7 - 03}{196 - 84} = \frac{7 + 03}{196 + 84}$ .
- $\frac{901}{37842} = \frac{9 - 01}{378 - 42} = \frac{9 + 01}{378 + 42}$ .
- $\frac{601}{58297} = \frac{6 - 01}{582 - 97} = \frac{6 + 01}{582 + 97}$ .
- $\frac{801}{29637} = \frac{8 - 01}{296 - 37} = \frac{8 + 01}{296 + 37}$ .
- $\frac{901}{46852} = \frac{9 - 01}{468 - 52} = \frac{9 + 01}{468 + 52}$ .
- $\frac{602}{17458} = \frac{6 - 02}{174 - 58} = \frac{6 + 02}{174 + 58}$ .
- $\frac{801}{47259} = \frac{8 - 01}{472 - 59} = \frac{8 + 01}{472 + 59}$ .
- $\frac{901}{64872} = \frac{9 - 01}{648 - 72} = \frac{9 + 01}{648 + 72}$ .
- $\frac{603}{15879} = \frac{6 - 03}{158 - 79} = \frac{6 + 03}{158 + 79}$ .
- $\frac{801}{59274} = \frac{8 - 01}{592 - 74} = \frac{8 + 01}{592 + 74}$ .
- $\frac{901}{75684} = \frac{9 - 01}{756 - 84} = \frac{9 + 01}{756 + 84}$ .
- $\frac{603}{18492} = \frac{6 - 03}{184 - 92} = \frac{6 + 03}{184 + 92}$ .
- $\frac{801}{73692} = \frac{8 - 01}{736 - 92} = \frac{8 + 01}{736 + 92}$ .
- $\frac{902}{35178} = \frac{9 - 02}{351 - 78} = \frac{9 + 02}{351 + 78}$ .
- $\frac{604}{13892} = \frac{6 - 04}{138 - 92} = \frac{6 + 04}{138 + 92}$ .
- $\frac{801}{75294} = \frac{8 - 01}{752 - 94} = \frac{8 + 01}{752 + 94}$ .
- $\frac{903}{16254} = \frac{9 - 03}{162 - 54} = \frac{9 + 03}{162 + 54}$ .
- $\frac{701}{36452} = \frac{7 - 01}{364 - 52} = \frac{7 + 01}{364 + 52}$ .
- $\frac{802}{63279} = \frac{8 - 01}{632 - 79} = \frac{8 + 01}{632 + 79}$ .
- $\frac{903}{17458} = \frac{9 - 03}{174 - 58} = \frac{9 + 03}{174 + 58}$ .
- $\frac{701}{39256} = \frac{7 - 01}{392 - 56} = \frac{7 + 01}{392 + 56}$ .
- $\frac{802}{15639} = \frac{8 - 02}{156 - 39} = \frac{8 + 02}{156 + 39}$ .
- $\frac{903}{26187} = \frac{9 - 03}{261 - 87} = \frac{9 + 03}{261 + 87}$ .
- $\frac{701}{48369} = \frac{7 - 01}{483 - 69} = \frac{7 + 01}{483 + 69}$ .
- $\frac{802}{31679} = \frac{8 - 02}{316 - 79} = \frac{8 + 02}{316 + 79}$ .
- $\frac{904}{15368} = \frac{9 - 04}{153 - 68} = \frac{9 + 04}{153 + 68}$ .
- $\frac{701}{62389} = \frac{7 - 01}{623 - 89} = \frac{7 + 01}{623 + 89}$ .
- $\frac{802}{36491} = \frac{8 - 02}{364 - 91} = \frac{8 + 02}{364 + 91}$ .

#### 4.2.6 Nine Digits

- $\frac{1602}{58473} = \frac{16 - 02}{584 - 73} = \frac{16 + 02}{584 + 73}$ .
- $\frac{1704}{23856} = \frac{17 - 04}{238 - 56} = \frac{17 + 04}{238 + 56}$ .
- $\frac{2103}{54678} = \frac{21 - 03}{546 - 78} = \frac{21 + 03}{546 + 78}$ .
- $\frac{1702}{49358} = \frac{17 - 02}{493 - 58} = \frac{17 + 02}{493 + 58}$ .
- $\frac{1903}{45672} = \frac{19 - 03}{456 - 72} = \frac{19 + 03}{456 + 72}$ .
- $\frac{2103}{65894} = \frac{21 - 03}{658 - 94} = \frac{21 + 03}{658 + 94}$ .

- $\frac{2104}{35768} = \frac{21 - 04}{357 - 68} = \frac{21 + 04}{357 + 68}.$
- $\frac{3204}{56871} = \frac{32 - 04}{568 - 71} = \frac{32 + 04}{568 + 71}.$
- $\frac{4107}{32856} = \frac{4 - 107}{32 - 856} = \frac{4 + 107}{32 + 856}.$
- $\frac{2307}{18456} = \frac{23 - 07}{184 - 56} = \frac{23 + 07}{184 + 56}.$
- $\frac{3402}{86751} = \frac{34 - 02}{867 - 51} = \frac{34 + 02}{867 + 51}.$
- $\frac{4108}{36972} = \frac{4 - 108}{36 - 972} = \frac{4 + 108}{36 + 972}.$
- $\frac{2403}{56871} = \frac{24 - 03}{568 - 71} = \frac{24 + 03}{568 + 71}.$
- $\frac{3406}{28951} = \frac{34 - 06}{289 - 51} = \frac{34 + 06}{289 + 51}.$
- $\frac{4109}{28763} = \frac{4 - 109}{28 - 763} = \frac{4 + 109}{28 + 763}.$
- $\frac{2703}{54961} = \frac{27 - 03}{549 - 61} = \frac{27 + 03}{549 + 61}.$
- $\frac{3451}{27608} = \frac{345 - 1}{2760 - 8} = \frac{345 + 1}{2760 + 8}.$
- $\frac{4137}{20685} = \frac{4 - 137}{20 - 685} = \frac{4 + 137}{20 + 685}.$
- $\frac{2709}{13846} = \frac{27 - 09}{138 - 46} = \frac{27 + 09}{138 + 46}.$
- $\frac{3582}{10746} = \frac{358 - 2}{1074 - 6} = \frac{358 + 2}{1074 + 6}.$
- $\frac{4156}{23897} = \frac{4 - 156}{23 - 897} = \frac{4 + 156}{23 + 897}.$
- $\frac{2803}{47651} = \frac{28 - 03}{476 - 51} = \frac{28 + 03}{476 + 51}.$
- $\frac{3604}{72981} = \frac{36 - 04}{729 - 81} = \frac{36 + 04}{729 + 81}.$
- $\frac{4167}{20835} = \frac{4 - 167}{20 - 835} = \frac{4 + 167}{20 + 835}.$
- $\frac{2804}{63791} = \frac{28 - 04}{637 - 91} = \frac{28 + 04}{637 + 91}.$
- $\frac{3609}{28471} = \frac{36 - 09}{284 - 71} = \frac{36 + 09}{284 + 71}.$
- $\frac{4173}{20865} = \frac{4 - 173}{20 - 865} = \frac{4 + 173}{20 + 865}.$
- $\frac{2804}{65193} = \frac{28 - 04}{651 - 93} = \frac{28 + 04}{651 + 93}.$
- $\frac{3609}{85146} = \frac{37 - 02}{851 - 46} = \frac{37 + 02}{851 + 46}.$
- $\frac{4187}{20935} = \frac{4 - 187}{20 - 935} = \frac{4 + 187}{20 + 935}.$
- $\frac{2807}{15639} = \frac{28 - 07}{156 - 39} = \frac{28 + 07}{156 + 39}.$
- $\frac{3702}{85192} = \frac{37 - 04}{851 - 92} = \frac{37 + 04}{851 + 92}.$
- $\frac{4278}{10695} = \frac{4 - 278}{10 - 695} = \frac{4 + 278}{10 + 695}.$
- $\frac{2807}{36491} = \frac{28 - 07}{364 - 91} = \frac{28 + 07}{364 + 91}.$
- $\frac{3702}{15048} = \frac{376 - 2}{1504 - 8} = \frac{376 + 2}{1504 + 8}.$
- $\frac{4392}{17568} = \frac{439 - 2}{1756 - 8} = \frac{439 + 2}{1756 + 8}.$
- $\frac{4510}{36982} = \frac{45 - 10}{369 - 82} = \frac{45 + 10}{369 + 82}.$
- $\frac{4530}{12986} = \frac{45 - 30}{129 - 86} = \frac{45 + 30}{129 + 86}.$
- $\frac{3061}{27549} = \frac{306 - 1}{2754 - 9} = \frac{306 + 1}{2754 + 9}.$
- $\frac{3810}{24765} = \frac{38 - 10}{247 - 65} = \frac{38 + 10}{247 + 65}.$
- $\frac{4581}{32067} = \frac{458 - 1}{3206 - 7} = \frac{458 + 1}{3206 + 7}.$
- $\frac{3071}{24568} = \frac{307 - 1}{2456 - 8} = \frac{307 + 1}{2456 + 8}.$
- $\frac{3907}{15628} = \frac{39 - 07}{156 - 28} = \frac{39 + 07}{156 + 28}.$
- $\frac{4582}{16037} = \frac{458 - 2}{1603 - 7} = \frac{458 + 2}{1603 + 7}.$
- $\frac{3104}{52768} = \frac{31 - 04}{527 - 68} = \frac{31 + 04}{527 + 68}.$
- $\frac{3942}{15768} = \frac{394 - 2}{1576 - 8} = \frac{394 + 2}{1576 + 8}.$
- $\frac{4591}{36728} = \frac{459 - 1}{3672 - 8} = \frac{459 + 1}{3672 + 8}.$
- $\frac{3104}{58976} = \frac{31 - 04}{589 - 76} = \frac{31 + 04}{589 + 76}.$
- $\frac{4081}{36729} = \frac{408 - 1}{3672 - 9} = \frac{408 + 1}{3672 + 9}.$
- $\frac{4602}{85137} = \frac{46 - 02}{851 - 37} = \frac{46 + 02}{851 + 37}.$
- $\frac{3106}{27954} = \frac{3 - 106}{27 - 954} = \frac{3 + 106}{27 + 954}.$
- $\frac{4091}{28637} = \frac{409 - 1}{2863 - 7} = \frac{409 + 1}{2863 + 7}.$
- $\frac{4603}{78251} = \frac{46 - 03}{782 - 51} = \frac{46 + 03}{782 + 51}.$

- $\frac{4609}{13827} = \frac{46 - 09}{138 - 27} = \frac{46 + 09}{138 + 27}$ .
- $\frac{5106}{28934} = \frac{51 - 06}{289 - 34} = \frac{51 + 06}{289 + 34}$ .
- $\frac{5486}{10972} = \frac{5 - 486}{10 - 972} = \frac{5 + 486}{10 + 972}$ .
- $\frac{4617}{23085} = \frac{46 - 17}{230 - 85} = \frac{46 + 17}{230 + 85}$ .
- $\frac{5140}{32896} = \frac{5 - 140}{32 - 896} = \frac{5 + 140}{32 + 896}$ .
- $\frac{5604}{23817} = \frac{56 - 04}{238 - 17} = \frac{56 + 04}{238 + 17}$ .
- $\frac{4623}{15879} = \frac{46 - 23}{158 - 79} = \frac{46 + 23}{158 + 79}$ .
- $\frac{5184}{20736} = \frac{5 - 184}{20 - 736} = \frac{5 + 184}{20 + 736}$ .
- $\frac{5607}{18423} = \frac{56 - 07}{184 - 23} = \frac{56 + 07}{184 + 23}$ .
- $\frac{4623}{17085} = \frac{46 - 23}{170 - 85} = \frac{46 + 23}{170 + 85}$ .
- $\frac{5190}{23874} = \frac{5 - 190}{23 - 874} = \frac{5 + 190}{23 + 874}$ .
- $\frac{5607}{24831} = \frac{56 - 07}{248 - 31} = \frac{56 + 07}{248 + 31}$ .
- $\frac{4651}{37208} = \frac{465 - 1}{3720 - 8} = \frac{465 + 1}{3720 + 8}$ .
- $\frac{5196}{20784} = \frac{5 - 196}{20 - 784} = \frac{5 + 196}{20 + 784}$ .
- $\frac{5607}{32841} = \frac{56 - 07}{328 - 41} = \frac{56 + 07}{328 + 41}$ .
- $\frac{4683}{10927} = \frac{468 - 3}{1092 - 7} = \frac{468 + 3}{1092 + 7}$ .
- $\frac{5204}{79361} = \frac{52 - 04}{793 - 61} = \frac{52 + 04}{793 + 61}$ .
- $\frac{5608}{32947} = \frac{56 - 08}{329 - 47} = \frac{56 + 08}{329 + 47}$ .
- $\frac{4691}{37528} = \frac{469 - 1}{3752 - 8} = \frac{469 + 1}{3752 + 8}$ .
- $\frac{5204}{81963} = \frac{52 - 04}{819 - 63} = \frac{52 + 04}{819 + 63}$ .
- $\frac{5683}{17049} = \frac{568 - 3}{1704 - 9} = \frac{568 + 3}{1704 + 9}$ .
- $\frac{4708}{32956} = \frac{47 - 08}{329 - 56} = \frac{47 + 08}{329 + 56}$ .
- $\frac{5204}{19874} = \frac{5 - 230}{19 - 874} = \frac{5 + 230}{19 + 874}$ .
- $\frac{5703}{91248} = \frac{57 - 03}{912 - 48} = \frac{57 + 03}{912 + 48}$ .
- $\frac{4716}{23580} = \frac{47 - 16}{235 - 80} = \frac{47 + 16}{235 + 80}$ .
- $\frac{5320}{14896} = \frac{5 - 320}{14 - 896} = \frac{5 + 320}{14 + 896}$ .
- $\frac{5718}{30496} = \frac{57 - 18}{304 - 96} = \frac{57 + 18}{304 + 96}$ .
- $\frac{4718}{23590} = \frac{47 - 18}{235 - 90} = \frac{47 + 18}{235 + 90}$ .
- $\frac{5342}{18697} = \frac{534 - 2}{1869 - 7} = \frac{534 + 2}{1869 + 7}$ .
- $\frac{5719}{20468} = \frac{57 - 19}{204 - 68} = \frac{57 + 19}{204 + 68}$ .
- $\frac{4761}{23805} = \frac{476 - 1}{2380 - 5} = \frac{476 + 1}{2380 + 5}$ .
- $\frac{5371}{42968} = \frac{537 - 1}{4296 - 8} = \frac{537 + 1}{4296 + 8}$ .
- $\frac{5791}{46328} = \frac{579 - 1}{4632 - 8} = \frac{579 + 1}{4632 + 8}$ .
- $\frac{4781}{23905} = \frac{478 - 1}{2390 - 5} = \frac{478 + 1}{2390 + 5}$ .
- $\frac{5406}{27931} = \frac{54 - 06}{279 - 31} = \frac{54 + 06}{279 + 31}$ .
- $\frac{5802}{49317} = \frac{58 - 02}{493 - 17} = \frac{58 + 02}{493 + 17}$ .
- $\frac{5829}{13467} = \frac{58 - 29}{134 - 67} = \frac{58 + 29}{134 + 67}$ .
- $\frac{4803}{91257} = \frac{48 - 03}{912 - 57} = \frac{48 + 03}{912 + 57}$ .
- $\frac{5406}{72981} = \frac{54 - 06}{729 - 81} = \frac{54 + 06}{729 + 81}$ .
- $\frac{5829}{14673} = \frac{58 - 29}{146 - 73} = \frac{58 + 29}{146 + 73}$ .
- $\frac{5102}{86734} = \frac{51 - 02}{867 - 34} = \frac{51 + 02}{867 + 34}$ .
- $\frac{5418}{20769} = \frac{54 - 18}{207 - 69} = \frac{54 + 18}{207 + 69}$ .
- $\frac{5921}{47368} = \frac{592 - 1}{4736 - 8} = \frac{592 + 1}{4736 + 8}$ .
- $\frac{5103}{47628} = \frac{51 - 03}{476 - 28} = \frac{51 + 03}{476 + 28}$ .
- $\frac{5427}{13869} = \frac{54 - 27}{138 - 69} = \frac{54 + 27}{138 + 69}$ .
- $\frac{5924}{10367} = \frac{592 - 4}{1036 - 7} = \frac{592 + 4}{1036 + 7}$ .
- $\frac{5103}{78246} = \frac{51 - 03}{782 - 46} = \frac{51 + 03}{782 + 46}$ .
- $\frac{5427}{18693} = \frac{54 - 27}{186 - 93} = \frac{54 + 27}{186 + 93}$ .
- $\frac{6012}{43587} = \frac{60 - 12}{435 - 87} = \frac{60 + 12}{435 + 87}$ .

- $\frac{6012}{48597} = \frac{60 - 12}{485 - 97} = \frac{60 + 12}{485 + 97}$ .
- $\frac{6341}{50728} = \frac{634 - 1}{5072 - 8} = \frac{634 + 1}{5072 + 8}$ .
- $\frac{6804}{52731} = \frac{68 - 04}{527 - 31} = \frac{68 + 04}{527 + 31}$ .
- $\frac{6024}{19578} = \frac{60 - 24}{195 - 78} = \frac{60 + 24}{195 + 78}$ .
- $\frac{6381}{57429} = \frac{638 - 1}{5742 - 9} = \frac{638 + 1}{5742 + 9}$ .
- $\frac{6819}{20457} = \frac{68 - 19}{204 - 57} = \frac{68 + 19}{204 + 57}$ .
- $\frac{6031}{54279} = \frac{603 - 1}{5427 - 9} = \frac{603 + 1}{5427 + 9}$ .
- $\frac{6407}{83291} = \frac{64 - 07}{832 - 91} = \frac{64 + 07}{832 + 91}$ .
- $\frac{6852}{13704} = \frac{685 - 2}{1370 - 4} = \frac{685 + 2}{1370 + 4}$ .
- $\frac{6081}{54729} = \frac{608 - 1}{5472 - 9} = \frac{608 + 1}{5472 + 9}$ .
- $\frac{6417}{32085} = \frac{64 - 17}{320 - 85} = \frac{64 + 17}{320 + 85}$ .
- $\frac{6918}{20754} = \frac{69 - 18}{207 - 54} = \frac{69 + 18}{207 + 54}$ .
- $\frac{6102}{34578} = \frac{6 - 102}{34 - 578} = \frac{6 + 102}{34 + 578}$ .
- $\frac{6432}{15879} = \frac{64 - 32}{158 - 79} = \frac{64 + 32}{158 + 79}$ .
- $\frac{6923}{17458} = \frac{69 - 23}{174 - 58} = \frac{69 + 23}{174 + 58}$ .
- $\frac{6103}{54927} = \frac{6 - 103}{54 - 927} = \frac{6 + 103}{54 + 927}$ .
- $\frac{6432}{17085} = \frac{64 - 32}{170 - 85} = \frac{64 + 32}{170 + 85}$ .
- $\frac{6927}{13854} = \frac{69 - 27}{138 - 54} = \frac{69 + 27}{138 + 54}$ .
- $\frac{6104}{79352} = \frac{61 - 04}{793 - 52} = \frac{61 + 04}{793 + 52}$ .
- $\frac{6453}{17208} = \frac{645 - 3}{1720 - 8} = \frac{645 + 3}{1720 + 8}$ .
- $\frac{6951}{27804} = \frac{695 - 1}{2780 - 4} = \frac{695 + 1}{2780 + 4}$ .
- $\frac{6108}{54972} = \frac{6 - 108}{54 - 972} = \frac{6 + 108}{54 + 972}$ .
- $\frac{6432}{58239} = \frac{643 - 1}{5823 - 9} = \frac{643 + 1}{5823 + 9}$ .
- $\frac{6982}{10473} = \frac{698 - 2}{1047 - 3} = \frac{698 + 2}{1047 + 3}$ .
- $\frac{6195}{24780} = \frac{6 - 195}{24 - 780} = \frac{6 + 195}{24 + 780}$ .
- $\frac{6485}{12970} = \frac{6 - 485}{12 - 970} = \frac{6 + 485}{12 + 970}$ .
- $\frac{7015}{29463} = \frac{70 - 15}{294 - 63} = \frac{70 + 15}{294 + 63}$ .
- $\frac{6304}{81952} = \frac{63 - 04}{819 - 52} = \frac{63 + 04}{819 + 52}$ .
- $\frac{6510}{24738} = \frac{65 - 10}{247 - 38} = \frac{65 + 10}{247 + 38}$ .
- $\frac{7015}{39284} = \frac{70 - 15}{392 - 84} = \frac{70 + 15}{392 + 84}$ .
- $\frac{6309}{28741} = \frac{63 - 09}{287 - 41} = \frac{63 + 09}{287 + 41}$ .
- $\frac{6729}{13458} = \frac{67 - 29}{134 - 58} = \frac{67 + 29}{134 + 58}$ .
- $\frac{7018}{24563} = \frac{70 - 18}{245 - 63} = \frac{70 + 18}{245 + 63}$ .
- $\frac{6309}{51874} = \frac{63 - 09}{518 - 74} = \frac{63 + 09}{518 + 74}$ .
- $\frac{6741}{53928} = \frac{674 - 1}{5392 - 8} = \frac{674 + 1}{5392 + 8}$ .
- $\frac{7031}{56248} = \frac{703 - 1}{5624 - 8} = \frac{703 + 1}{5624 + 8}$ .
- $\frac{6309}{57482} = \frac{63 - 09}{574 - 82} = \frac{63 + 09}{574 + 82}$ .
- $\frac{6782}{30519} = \frac{678 - 2}{3051 - 9} = \frac{678 + 2}{3051 + 9}$ .
- $\frac{7035}{12864} = \frac{70 - 35}{128 - 64} = \frac{70 + 35}{128 + 64}$ .
- $\frac{6315}{29470} = \frac{63 - 15}{294 - 70} = \frac{63 + 15}{294 + 70}$ .
- $\frac{6791}{54328} = \frac{679 - 1}{5432 - 8} = \frac{679 + 1}{5432 + 8}$ .
- $\frac{7035}{18492} = \frac{70 - 35}{184 - 92} = \frac{70 + 35}{184 + 92}$ .
- $\frac{6318}{24570} = \frac{63 - 18}{245 - 70} = \frac{63 + 18}{245 + 70}$ .
- $\frac{6792}{13584} = \frac{679 - 2}{1358 - 4} = \frac{679 + 2}{1358 + 4}$ .
- $\frac{7041}{56328} = \frac{704 - 1}{5632 - 8} = \frac{704 + 1}{5632 + 8}$ .
- $\frac{6318}{25974} = \frac{63 - 18}{259 - 74} = \frac{63 + 18}{259 + 74}$ .
- $\frac{6804}{35721} = \frac{68 - 04}{357 - 21} = \frac{68 + 04}{357 + 21}$ .
- $\frac{7042}{31689} = \frac{704 - 2}{3168 - 9} = \frac{704 + 2}{3168 + 9}$ .

- $\frac{7091}{28364} = \frac{709 - 1}{2836 - 4} = \frac{709 + 1}{2836 + 4}$ .
- $\frac{7269}{14538} = \frac{7 - 269}{14 - 538} = \frac{7 + 269}{14 + 538}$ .
- $\frac{7604}{58931} = \frac{76 - 04}{589 - 31} = \frac{76 + 04}{589 + 31}$ .
- $\frac{7103}{56824} = \frac{7 - 103}{56 - 824} = \frac{7 + 103}{56 + 824}$ .
- $\frac{7281}{36405} = \frac{728 - 1}{3640 - 5} = \frac{728 + 1}{3640 + 5}$ .
- $\frac{7614}{53298} = \frac{76 - 14}{532 - 98} = \frac{76 + 14}{532 + 98}$ .
- $\frac{7104}{56832} = \frac{7 - 104}{56 - 832} = \frac{7 + 104}{56 + 832}$ .
- $\frac{7294}{15630} = \frac{7 - 294}{15 - 630} = \frac{7 + 294}{15 + 630}$ .
- $\frac{7619}{34085} = \frac{76 - 19}{340 - 85} = \frac{76 + 19}{340 + 85}$ .
- $\frac{7109}{28436} = \frac{7 - 109}{28 - 436} = \frac{7 + 109}{28 + 436}$ .
- $\frac{7302}{58416} = \frac{73 - 02}{584 - 16} = \frac{73 + 02}{584 + 16}$ .
- $\frac{7634}{19085} = \frac{76 - 34}{190 - 85} = \frac{76 + 34}{190 + 85}$ .
- $\frac{7123}{56984} = \frac{7 - 123}{56 - 984} = \frac{7 + 123}{56 + 984}$ .
- $\frac{7312}{58496} = \frac{73 - 12}{584 - 96} = \frac{73 + 12}{584 + 96}$ .
- $\frac{7638}{10452} = \frac{76 - 38}{104 - 52} = \frac{76 + 38}{104 + 52}$ .
- $\frac{7128}{35640} = \frac{7 - 128}{35 - 640} = \frac{7 + 128}{35 + 640}$ .
- $\frac{7324}{10986} = \frac{732 - 4}{1098 - 6} = \frac{732 + 4}{1098 + 6}$ .
- $\frac{7641}{38205} = \frac{764 - 1}{3820 - 5} = \frac{764 + 1}{3820 + 5}$ .
- $\frac{7154}{29638} = \frac{7 - 154}{29 - 638} = \frac{7 + 154}{29 + 638}$ .
- $\frac{7362}{18405} = \frac{736 - 2}{1840 - 5} = \frac{736 + 2}{1840 + 5}$ .
- $\frac{7692}{15384} = \frac{769 - 2}{1538 - 4} = \frac{769 + 2}{1538 + 4}$ .
- $\frac{7164}{35820} = \frac{7 - 164}{35 - 820} = \frac{7 + 164}{35 + 820}$ .
- $\frac{7392}{15840} = \frac{7 - 392}{15 - 840} = \frac{7 + 392}{15 + 840}$ .
- $\frac{7803}{54621} = \frac{78 - 03}{546 - 21} = \frac{78 + 03}{546 + 21}$ .
- $\frac{7184}{35920} = \frac{7 - 184}{35 - 920} = \frac{7 + 184}{35 + 920}$ .
- $\frac{7409}{51863} = \frac{74 - 09}{518 - 63} = \frac{74 + 09}{518 + 63}$ .
- $\frac{7824}{19560} = \frac{78 - 24}{195 - 60} = \frac{78 + 24}{195 + 60}$ .
- $\frac{7203}{45619} = \frac{72 - 03}{456 - 19} = \frac{72 + 03}{456 + 19}$ .
- $\frac{7410}{62985} = \frac{74 - 10}{629 - 85} = \frac{74 + 10}{629 + 85}$ .
- $\frac{7839}{10452} = \frac{78 - 39}{104 - 52} = \frac{78 + 39}{104 + 52}$ .
- $\frac{7208}{36941} = \frac{72 - 08}{369 - 41} = \frac{72 + 08}{369 + 41}$ .
- $\frac{7418}{25963} = \frac{74 - 18}{259 - 63} = \frac{74 + 18}{259 + 63}$ .
- $\frac{7841}{39205} = \frac{784 - 1}{3920 - 5} = \frac{784 + 1}{3920 + 5}$ .
- $\frac{7208}{54961} = \frac{72 - 08}{549 - 61} = \frac{72 + 08}{549 + 61}$ .
- $\frac{7842}{19605} = \frac{784 - 2}{1960 - 5} = \frac{784 + 2}{1960 + 5}$ .
- $\frac{7210}{68495} = \frac{72 - 10}{684 - 95} = \frac{72 + 10}{684 + 95}$ .
- $\frac{7421}{59368} = \frac{742 - 1}{5936 - 8} = \frac{742 + 1}{5936 + 8}$ .
- $\frac{7893}{10524} = \frac{789 - 3}{1052 - 4} = \frac{789 + 3}{1052 + 4}$ .
- $\frac{7236}{10854} = \frac{72 - 36}{108 - 54} = \frac{72 + 36}{108 + 54}$ .
- $\frac{7531}{60248} = \frac{753 - 1}{6024 - 8} = \frac{753 + 1}{6024 + 8}$ .
- $\frac{7905}{12648} = \frac{790 - 5}{1264 - 8} = \frac{790 + 5}{1264 + 8}$ .
- $\frac{7245}{18630} = \frac{7 - 245}{18 - 630} = \frac{7 + 245}{18 + 630}$ .
- $\frac{7541}{60328} = \frac{754 - 1}{6032 - 8} = \frac{754 + 1}{6032 + 8}$ .
- $\frac{7923}{10564} = \frac{792 - 3}{1056 - 4} = \frac{792 + 3}{1056 + 4}$ .
- $\frac{7248}{13590} = \frac{72 - 48}{135 - 90} = \frac{72 + 48}{135 + 90}$ .
- $\frac{7542}{30168} = \frac{754 - 2}{3016 - 8} = \frac{754 + 2}{3016 + 8}$ .
- $\frac{8016}{23547} = \frac{80 - 16}{235 - 47} = \frac{80 + 16}{235 + 47}$ .

$$\bullet \frac{8041}{72369} = \frac{804 - 1}{7236 - 9} = \frac{804 + 1}{7236 + 9}.$$

$$\bullet \frac{8361}{75249} = \frac{836 - 1}{7524 - 9} = \frac{836 + 1}{7524 + 9}.$$

$$\bullet \frac{8905}{12467} = \frac{890 - 5}{1246 - 7} = \frac{890 + 5}{1246 + 7}.$$

$$\bullet \frac{8061}{72549} = \frac{806 - 1}{7254 - 9} = \frac{806 + 1}{7254 + 9}.$$

$$\bullet \frac{8372}{10465} = \frac{8 - 372}{10 - 465} = \frac{8 + 372}{10 + 465}.$$

$$\bullet \frac{9018}{23547} = \frac{90 - 18}{235 - 47} = \frac{90 + 18}{235 + 47}.$$

$$\bullet \frac{8104}{72936} = \frac{8 - 104}{72 - 936} = \frac{8 + 104}{72 + 936}.$$

$$\bullet \frac{8415}{39270} = \frac{84 - 15}{392 - 70} = \frac{84 + 15}{392 + 70}.$$

$$\bullet \frac{9035}{21684} = \frac{90 - 35}{216 - 84} = \frac{90 + 35}{216 + 84}.$$

$$\bullet \frac{8106}{72954} = \frac{8 - 106}{72 - 954} = \frac{8 + 106}{72 + 954}.$$

$$\bullet \frac{8435}{21690} = \frac{84 - 35}{216 - 90} = \frac{84 + 35}{216 + 90}.$$

$$\bullet \frac{9036}{18574} = \frac{90 - 36}{185 - 74} = \frac{90 + 36}{185 + 74}.$$

$$\bullet \frac{8120}{49735} = \frac{8 - 120}{49 - 735} = \frac{8 + 120}{49 + 735}.$$

$$\bullet \frac{8490}{12735} = \frac{8 - 490}{12 - 735} = \frac{8 + 490}{12 + 735}.$$

$$\bullet \frac{9041}{63287} = \frac{904 - 1}{6328 - 7} = \frac{904 + 1}{6328 + 7}.$$

$$\bullet \frac{8120}{63945} = \frac{8 - 120}{63 - 945} = \frac{8 + 120}{63 + 945}.$$

$$\bullet \frac{8510}{62974} = \frac{85 - 10}{629 - 74} = \frac{85 + 10}{629 + 74}.$$

$$\bullet \frac{9045}{17286} = \frac{90 - 45}{172 - 86} = \frac{90 + 45}{172 + 86}.$$

$$\bullet \frac{8127}{40635} = \frac{8 - 127}{40 - 635} = \frac{8 + 127}{40 + 635}.$$

$$\bullet \frac{8517}{23046} = \frac{85 - 17}{230 - 46} = \frac{85 + 17}{230 + 46}.$$

$$\bullet \frac{9048}{13572} = \frac{90 - 48}{135 - 72} = \frac{90 + 48}{135 + 72}.$$

$$\bullet \frac{8132}{46759} = \frac{8 - 132}{46 - 759} = \frac{8 + 132}{46 + 759}.$$

$$\bullet \frac{8517}{32064} = \frac{85 - 17}{320 - 64} = \frac{85 + 17}{320 + 64}.$$

$$\bullet \frac{9071}{36284} = \frac{907 - 1}{3628 - 4} = \frac{907 + 1}{3628 + 4}.$$

$$\bullet \frac{8136}{27459} = \frac{8 - 136}{27 - 459} = \frac{8 + 136}{27 + 459}.$$

$$\bullet \frac{8517}{46092} = \frac{85 - 17}{460 - 92} = \frac{85 + 17}{460 + 92}.$$

$$\bullet \frac{9104}{63728} = \frac{9 - 104}{63 - 728} = \frac{9 + 104}{63 + 728}.$$

$$\bullet \frac{8169}{24507} = \frac{8 - 169}{24 - 507} = \frac{8 + 169}{24 + 507}.$$

$$\bullet \frac{8519}{34076} = \frac{85 - 19}{340 - 76} = \frac{85 + 19}{340 + 76}.$$

$$\bullet \frac{9107}{36428} = \frac{9 - 107}{36 - 428} = \frac{9 + 107}{36 + 428}.$$

$$\bullet \frac{8172}{30645} = \frac{8 - 172}{30 - 645} = \frac{8 + 172}{30 + 645}.$$

$$\bullet \frac{8534}{19076} = \frac{85 - 34}{190 - 76} = \frac{85 + 34}{190 + 76}.$$

$$\bullet \frac{9107}{83264} = \frac{91 - 07}{832 - 64} = \frac{91 + 07}{832 + 64}.$$

$$\bullet \frac{8205}{14769} = \frac{820 - 5}{1476 - 9} = \frac{820 + 5}{1476 + 9}.$$

$$\bullet \frac{8546}{17092} = \frac{85 - 46}{170 - 92} = \frac{85 + 46}{170 + 92}.$$

$$\bullet \frac{9127}{36508} = \frac{9 - 127}{36 - 508} = \frac{9 + 127}{36 + 508}.$$

$$\bullet \frac{8209}{57463} = \frac{82 - 09}{574 - 63} = \frac{82 + 09}{574 + 63}.$$

$$\bullet \frac{8645}{17290} = \frac{86 - 45}{172 - 90} = \frac{86 + 45}{172 + 90}.$$

$$\bullet \frac{9135}{48720} = \frac{9 - 135}{48 - 720} = \frac{9 + 135}{48 + 720}.$$

$$\bullet \frac{8276}{10345} = \frac{8 - 276}{10 - 345} = \frac{8 + 276}{10 + 345}.$$

$$\bullet \frac{8652}{17304} = \frac{865 - 2}{1730 - 4} = \frac{865 + 2}{1730 + 4}.$$

$$\bullet \frac{9136}{27408} = \frac{9 - 136}{27 - 408} = \frac{9 + 136}{27 + 408}.$$

$$\bullet \frac{8341}{75069} = \frac{834 - 1}{7506 - 9} = \frac{834 + 1}{7506 + 9}.$$

$$\bullet \frac{8712}{43560} = \frac{87 - 12}{435 - 60} = \frac{87 + 12}{435 + 60}.$$

$$\bullet \frac{9153}{46782} = \frac{9 - 153}{46 - 782} = \frac{9 + 153}{46 + 782}.$$

$$\bullet \frac{8360}{21945} = \frac{8 - 360}{21 - 945} = \frac{8 + 360}{21 + 945}.$$

$$\bullet \frac{8721}{43605} = \frac{872 - 1}{4360 - 5} = \frac{872 + 1}{4360 + 5}.$$

$$\bullet \frac{9168}{27504} = \frac{9 - 168}{27 - 504} = \frac{9 + 168}{27 + 504}.$$

$$\begin{aligned} \bullet \frac{9172}{45860} &= \frac{9 - 172}{45 - 860} = \frac{9 + 172}{45 + 860}. & \bullet \frac{9321}{74568} &= \frac{932 - 1}{7456 - 8} = \frac{932 + 1}{7456 + 8}. & \bullet \frac{9541}{76328} &= \frac{954 - 1}{7632 - 8} = \frac{954 + 1}{7632 + 8}. \\ \bullet \frac{9185}{36740} &= \frac{9 - 185}{36 - 740} = \frac{9 + 185}{36 + 740}. & \bullet \frac{9378}{12504} &= \frac{9 - 378}{12 - 504} = \frac{9 + 378}{12 + 504}. & \bullet \frac{9612}{58473} &= \frac{96 - 12}{584 - 73} = \frac{96 + 12}{584 + 73}. \\ \bullet \frac{9204}{85137} &= \frac{92 - 04}{851 - 37} = \frac{92 + 04}{851 + 37}. & \bullet \frac{9387}{14602} &= \frac{9 - 387}{14 - 602} = \frac{9 + 387}{14 + 602}. & \bullet \frac{9618}{30457} &= \frac{96 - 18}{304 - 57} = \frac{96 + 18}{304 + 57}. \\ \bullet \frac{9216}{35840} &= \frac{9 - 216}{35 - 840} = \frac{9 + 216}{35 + 840}. & \bullet \frac{9421}{75368} &= \frac{942 - 1}{7536 - 8} = \frac{942 + 1}{7536 + 8}. & \bullet \frac{9632}{17458} &= \frac{96 - 32}{174 - 58} = \frac{96 + 32}{174 + 58}. \\ \bullet \frac{9217}{46085} &= \frac{92 - 17}{460 - 85} = \frac{92 + 17}{460 + 85}. & \bullet \frac{9486}{13702} &= \frac{9 - 486}{13 - 702} = \frac{9 + 486}{13 + 702}. & \bullet \frac{9712}{48560} &= \frac{97 - 12}{485 - 60} = \frac{97 + 12}{485 + 60}. \\ \bullet \frac{9246}{17085} &= \frac{92 - 46}{170 - 85} = \frac{92 + 46}{170 + 85}. & \bullet \frac{9504}{13728} &= \frac{9 - 504}{13 - 728} = \frac{9 + 504}{13 + 728}. & \bullet \frac{9721}{48605} &= \frac{972 - 1}{4860 - 5} = \frac{972 + 1}{4860 + 5}. \\ \bullet \frac{9247}{10568} &= \frac{924 - 7}{1056 - 8} = \frac{924 + 7}{1056 + 8}. & \bullet \frac{9510}{68472} &= \frac{95 - 10}{684 - 72} = \frac{95 + 10}{684 + 72}. & \bullet \frac{9814}{53276} &= \frac{98 - 14}{532 - 76} = \frac{98 + 14}{532 + 76}. \\ \bullet \frac{9267}{18534} &= \frac{9 - 267}{18 - 534} = \frac{9 + 267}{18 + 534}. & \bullet \frac{9531}{76248} &= \frac{953 - 1}{7624 - 8} = \frac{953 + 1}{7624 + 8}. & \bullet \frac{9862}{34517} &= \frac{986 - 2}{3451 - 7} = \frac{986 + 2}{3451 + 7}. \end{aligned}$$

#### 4.2.7 Ten Digits

$$\begin{aligned} \bullet \frac{10345}{26897} &= \frac{10 - 345}{26 - 897} = \frac{10 + 345}{26 + 897}. & \bullet \frac{14529}{38076} &= \frac{145 - 29}{380 - 76} = \frac{145 + 29}{380 + 76}. & \bullet \frac{15407}{63829} &= \frac{154 - 07}{638 - 29} = \frac{154 + 07}{638 + 29}. \\ \bullet \frac{10542}{36897} &= \frac{1054 - 2}{3689 - 7} = \frac{1054 + 2}{3689 + 7}. & \bullet \frac{14685}{29370} &= \frac{1 - 4685}{2 - 9370} = \frac{1 + 4685}{2 + 9370}. & \bullet \frac{15486}{30972} &= \frac{15 - 486}{30 - 972} = \frac{15 + 486}{30 + 972}. \\ \bullet \frac{13026}{48597} &= \frac{130 - 26}{485 - 97} = \frac{130 + 26}{485 + 97}. & \bullet \frac{14865}{29730} &= \frac{1 - 4865}{2 - 9730} = \frac{1 + 4865}{2 + 9730}. & \bullet \frac{15604}{89723} &= \frac{156 - 04}{897 - 23} = \frac{156 + 04}{897 + 23}. \\ \bullet \frac{13208}{75946} &= \frac{132 - 08}{759 - 46} = \frac{132 + 08}{759 + 46}. & \bullet \frac{15084}{26397} &= \frac{1508 - 4}{2639 - 7} = \frac{1508 + 4}{2639 + 7}. & \bullet \frac{15642}{70389} &= \frac{1564 - 2}{7038 - 9} = \frac{1564 + 2}{7038 + 9}. \\ \bullet \frac{13527}{48096} &= \frac{135 - 27}{480 - 96} = \frac{135 + 27}{480 + 96}. & \bullet \frac{15237}{60948} &= \frac{15 - 237}{60 - 948} = \frac{15 + 237}{60 + 948}. & \bullet \frac{16032}{48597} &= \frac{160 - 32}{485 - 97} = \frac{160 + 32}{485 + 97}. \\ \bullet \frac{13608}{45927} &= \frac{136 - 08}{459 - 27} = \frac{136 + 08}{459 + 27}. & \bullet \frac{15309}{47628} &= \frac{153 - 09}{476 - 28} = \frac{153 + 09}{476 + 28}. & \bullet \frac{16485}{32970} &= \frac{16 - 485}{32 - 970} = \frac{16 + 485}{32 + 970}. \\ \bullet \frac{13902}{48657} &= \frac{1390 - 2}{4865 - 7} = \frac{1390 + 2}{4865 + 7}. & \bullet \frac{15309}{78246} &= \frac{153 - 09}{782 - 46} = \frac{153 + 09}{782 + 46}. & \bullet \frac{16530}{42978} &= \frac{165 - 30}{429 - 78} = \frac{165 + 30}{429 + 78}. \\ & & & \bullet \frac{16748}{20935} &= \frac{16 - 748}{20 - 935} = \frac{16 + 748}{20 + 935}. \end{aligned}$$

- $\frac{17068}{23594} = \frac{170 - 68}{235 - 94} = \frac{170 + 68}{235 + 94}.$
- $\frac{21054}{73689} = \frac{2 - 1054}{7 - 3689} = \frac{2 + 1054}{7 + 3689}.$
- $\frac{25893}{60417} = \frac{2589 - 3}{6041 - 7} = \frac{2589 + 3}{6041 + 7}.$
- $\frac{17235}{68940} = \frac{17 - 235}{68 - 940} = \frac{17 + 235}{68 + 940}.$
- $\frac{21390}{74865} = \frac{2 - 1390}{7 - 4865} = \frac{2 + 1390}{7 + 4865}.$
- $\frac{25974}{30186} = \frac{259 - 74}{301 - 86} = \frac{259 + 74}{301 + 86}.$
- $\frac{17352}{69408} = \frac{1735 - 2}{6940 - 8} = \frac{1735 + 2}{6940 + 8}.$
- $\frac{21564}{97038} = \frac{2 - 1564}{9 - 7038} = \frac{2 + 1564}{9 + 7038}.$
- $\frac{26130}{97485} = \frac{26 - 130}{97 - 485} = \frac{26 + 130}{97 + 485}.$
- $\frac{18270}{63945} = \frac{18 - 270}{63 - 945} = \frac{18 + 270}{63 + 945}.$
- $\frac{21735}{49680} = \frac{217 - 35}{496 - 80} = \frac{217 + 35}{496 + 80}.$
- $\frac{27018}{94563} = \frac{270 - 18}{945 - 63} = \frac{270 + 18}{945 + 63}.$
- $\frac{18279}{30465} = \frac{18 - 279}{30 - 465} = \frac{18 + 279}{30 + 465}.$
- $\frac{21735}{86940} = \frac{2 - 1735}{8 - 6940} = \frac{2 + 1735}{8 + 6940}.$
- $\frac{27093}{54186} = \frac{2709 - 3}{5418 - 6} = \frac{2709 + 3}{5418 + 6}.$
- $\frac{18423}{76095} = \frac{184 - 23}{760 - 95} = \frac{184 + 23}{760 + 95}.$
- $\frac{21843}{50967} = \frac{2184 - 3}{5096 - 7} = \frac{2184 + 3}{5096 + 7}.$
- $\frac{27135}{96480} = \frac{27 - 135}{96 - 480} = \frac{27 + 135}{96 + 480}.$
- $\frac{18476}{23095} = \frac{184 - 76}{230 - 95} = \frac{184 + 76}{230 + 95}.$
- $\frac{23058}{69174} = \frac{2 - 3058}{6 - 9174} = \frac{2 + 3058}{6 + 9174}.$
- $\frac{27309}{54618} = \frac{27 - 309}{54 - 618} = \frac{27 + 309}{54 + 618}.$
- $\frac{18537}{46092} = \frac{185 - 37}{460 - 92} = \frac{185 + 37}{460 + 92}.$
- $\frac{21843}{46158} = \frac{2 - 3079}{4 - 6158} = \frac{2 + 3079}{4 + 6158}.$
- $\frac{27918}{46530} = \frac{279 - 18}{465 - 30} = \frac{279 + 18}{465 + 30}.$
- $\frac{18546}{37092} = \frac{185 - 46}{370 - 92} = \frac{185 + 46}{370 + 92}.$
- $\frac{23184}{57960} = \frac{2 - 3184}{5 - 7960} = \frac{2 + 3184}{5 + 7960}.$
- $\frac{28476}{53901} = \frac{28 - 476}{53 - 901} = \frac{28 + 476}{53 + 901}.$
- $\frac{18645}{37290} = \frac{186 - 45}{372 - 90} = \frac{186 + 45}{372 + 90}.$
- $\frac{23079}{46158} = \frac{2 - 3079}{4 - 6158} = \frac{2 + 3079}{4 + 6158}.$
- $\frac{29073}{58146} = \frac{2907 - 3}{5814 - 6} = \frac{2907 + 3}{5814 + 6}.$
- $\frac{18734}{50692} = \frac{187 - 34}{506 - 92} = \frac{187 + 34}{506 + 92}.$
- $\frac{23517}{94068} = \frac{235 - 17}{940 - 68} = \frac{235 + 17}{940 + 68}.$
- $\frac{29145}{76380} = \frac{29 - 145}{76 - 380} = \frac{29 + 145}{76 + 380}.$
- $\frac{18964}{23705} = \frac{1896 - 4}{2370 - 5} = \frac{1896 + 4}{2370 + 5}.$
- $\frac{23715}{94860} = \frac{237 - 15}{948 - 60} = \frac{237 + 15}{948 + 60}.$
- $\frac{29307}{58614} = \frac{29 - 307}{58 - 614} = \frac{29 + 307}{58 + 614}.$
- $\frac{19530}{46872} = \frac{195 - 30}{468 - 72} = \frac{195 + 30}{468 + 72}.$
- $\frac{23184}{95760} = \frac{23 - 184}{95 - 760} = \frac{23 + 184}{95 + 760}.$
- $\frac{29406}{37518} = \frac{29 - 406}{37 - 518} = \frac{29 + 406}{37 + 518}.$
- $\frac{19560}{27384} = \frac{195 - 60}{273 - 84} = \frac{195 + 60}{273 + 84}.$
- $\frac{24318}{60795} = \frac{24 - 318}{60 - 795} = \frac{24 + 318}{60 + 795}.$
- $\frac{29637}{40851} = \frac{296 - 37}{408 - 51} = \frac{296 + 37}{408 + 51}.$
- $\frac{20583}{61749} = \frac{2058 - 3}{6174 - 9} = \frac{2058 + 3}{6174 + 9}.$
- $\frac{24716}{30895} = \frac{24 - 716}{30 - 895} = \frac{24 + 716}{30 + 895}.$
- $\frac{29754}{31806} = \frac{29 - 754}{31 - 806} = \frac{29 + 754}{31 + 806}.$
- $\frac{20793}{41586} = \frac{2079 - 3}{4158 - 6} = \frac{2079 + 3}{4158 + 6}.$
- $\frac{24876}{31095} = \frac{248 - 76}{310 - 95} = \frac{248 + 76}{310 + 95}.$
- $\frac{30165}{78429} = \frac{30 - 165}{78 - 429} = \frac{30 + 165}{78 + 429}.$

- $\frac{30195}{72468} = \frac{30 - 195}{72 - 468} = \frac{30 + 195}{72 + 468}.$
- $\frac{32841}{76095} = \frac{328 - 41}{760 - 95} = \frac{328 + 41}{760 + 95}.$
- $\frac{41328}{95760} = \frac{41 - 328}{95 - 760} = \frac{41 + 328}{95 + 760}.$
- $\frac{30582}{91746} = \frac{3058 - 2}{9174 - 6} = \frac{3058 + 2}{9174 + 6}.$
- $\frac{32876}{41095} = \frac{328 - 76}{410 - 95} = \frac{328 + 76}{410 + 95}.$
- $\frac{41508}{72639} = \frac{4 - 1508}{7 - 2639} = \frac{4 + 1508}{7 + 2639}.$
- $\frac{30729}{61458} = \frac{307 - 29}{614 - 58} = \frac{307 + 29}{614 + 58}.$
- $\frac{32907}{65814} = \frac{3 - 2907}{6 - 5814} = \frac{3 + 2907}{6 + 5814}.$
- $\frac{41823}{69705} = \frac{4182 - 3}{6970 - 5} = \frac{4182 + 3}{6970 + 5}.$
- $\frac{30792}{61584} = \frac{3079 - 2}{6158 - 4} = \frac{3079 + 2}{6158 + 4}.$
- $\frac{34182}{56970} = \frac{3 - 4182}{5 - 6970} = \frac{3 + 4182}{5 + 6970}.$
- $\frac{41896}{52370} = \frac{4 - 1896}{5 - 2370} = \frac{4 + 1896}{5 + 2370}.$
- $\frac{30927}{61854} = \frac{309 - 27}{618 - 54} = \frac{309 + 27}{618 + 54}.$
- $\frac{34187}{92506} = \frac{34 - 187}{92 - 506} = \frac{34 + 187}{92 + 506}.$
- $\frac{42968}{53710} = \frac{4 - 2968}{5 - 3710} = \frac{4 + 2968}{5 + 3710}.$
- $\frac{31062}{48597} = \frac{310 - 62}{485 - 97} = \frac{310 + 62}{485 + 97}.$
- $\frac{34510}{89726} = \frac{345 - 10}{897 - 26} = \frac{345 + 10}{897 + 26}.$
- $\frac{45186}{90372} = \frac{45 - 186}{90 - 372} = \frac{45 + 186}{90 + 372}.$
- $\frac{31248}{95760} = \frac{31 - 248}{95 - 760} = \frac{31 + 248}{95 + 760}.$
- $\frac{35217}{80496} = \frac{35 - 217}{80 - 496} = \frac{35 + 217}{80 + 496}.$
- $\frac{45360}{89712} = \frac{45 - 360}{89 - 712} = \frac{45 + 360}{89 + 712}.$
- $\frac{31824}{79560} = \frac{318 - 24}{795 - 60} = \frac{318 + 24}{795 + 60}.$
- $\frac{34510}{89726} = \frac{345 - 10}{897 - 26} = \frac{345 + 10}{897 + 26}.$
- $\frac{45360}{91728} = \frac{45 - 360}{91 - 728} = \frac{45 + 360}{91 + 728}.$
- $\frac{31842}{79605} = \frac{3184 - 2}{7960 - 5} = \frac{3184 + 2}{7960 + 5}.$
- $\frac{36045}{71289} = \frac{360 - 45}{712 - 89} = \frac{360 + 45}{712 + 89}.$
- $\frac{46185}{92370} = \frac{46 - 185}{92 - 370} = \frac{46 + 185}{92 + 370}.$
- $\frac{31842}{79605} = \frac{3184 - 2}{7960 - 5} = \frac{3184 + 2}{7960 + 5}.$
- $\frac{36045}{72891} = \frac{360 - 45}{728 - 91} = \frac{360 + 45}{728 + 91}.$
- $\frac{46312}{57890} = \frac{46 - 6312}{57 - 7890} = \frac{46 + 6312}{57 + 7890}.$
- $\frac{32058}{96174} = \frac{3 - 2058}{9 - 6174} = \frac{3 + 2058}{9 + 6174}.$
- $\frac{36712}{45890} = \frac{36 - 712}{45 - 890} = \frac{36 + 712}{45 + 890}.$
- $\frac{46328}{57910} = \frac{46 - 6328}{57 - 7910} = \frac{46 + 6328}{57 + 7910}.$
- $\frac{32079}{64158} = \frac{3 - 2079}{6 - 4158} = \frac{3 + 2079}{6 + 4158}.$
- $\frac{36728}{45910} = \frac{36 - 728}{45 - 910} = \frac{36 + 728}{45 + 910}.$
- $\frac{46712}{58390} = \frac{46 - 6712}{58 - 8390} = \frac{46 + 6712}{58 + 8390}.$
- $\frac{32160}{97485} = \frac{32 - 160}{97 - 485} = \frac{32 + 160}{97 + 485}.$
- $\frac{37185}{92460} = \frac{37 - 185}{92 - 460} = \frac{37 + 185}{92 + 460}.$
- $\frac{46782}{53901} = \frac{46 - 782}{53 - 901} = \frac{46 + 782}{53 + 901}.$
- $\frac{32184}{75096} = \frac{3 - 2184}{7 - 5096} = \frac{3 + 2184}{7 + 5096}.$
- $\frac{37296}{51408} = \frac{37 - 296}{51 - 408} = \frac{37 + 296}{51 + 408}.$
- $\frac{46851}{93702} = \frac{4685 - 1}{9370 - 2} = \frac{4685 + 1}{9370 + 2}.$
- $\frac{32589}{76041} = \frac{3 - 2589}{7 - 6041} = \frac{3 + 2589}{7 + 6041}.$
- $\frac{40629}{51837} = \frac{406 - 29}{518 - 37} = \frac{406 + 29}{518 + 37}.$
- $\frac{47136}{58920} = \frac{4 - 7136}{5 - 8920} = \frac{4 + 7136}{5 + 8920}.$
- $\frac{32709}{65418} = \frac{3 - 2709}{6 - 5418} = \frac{3 + 2709}{6 + 5418}.$
- $\frac{40851}{63279} = \frac{408 - 51}{632 - 79} = \frac{408 + 51}{632 + 79}.$
- $\frac{47328}{59160} = \frac{4 - 7328}{5 - 9160} = \frac{4 + 7328}{5 + 9160}.$
- $\frac{32716}{40895} = \frac{32 - 716}{40 - 895} = \frac{32 + 716}{40 + 895}.$
- $\frac{40851}{73692} = \frac{408 - 51}{736 - 92} = \frac{408 + 51}{736 + 92}.$
- $\frac{47368}{59210} = \frac{4 - 7368}{5 - 9210} = \frac{4 + 7368}{5 + 9210}.$

- $\frac{47628}{90153} = \frac{476 - 28}{901 - 53} = \frac{476 + 28}{901 + 53}$ .
- $\frac{63284}{79105} = \frac{6328 - 4}{7910 - 5} = \frac{6328 + 4}{7910 + 5}$ .
- $\frac{72836}{91045} = \frac{728 - 36}{910 - 45} = \frac{728 + 36}{910 + 45}$ .
- $\frac{48516}{97032} = \frac{485 - 16}{970 - 32} = \frac{485 + 16}{970 + 32}$ .
- $\frac{63504}{89712} = \frac{63 - 504}{89 - 712} = \frac{63 + 504}{89 + 712}$ .
- $\frac{73248}{91560} = \frac{732 - 48}{915 - 60} = \frac{732 + 48}{915 + 60}$ .
- $\frac{48615}{97230} = \frac{486 - 15}{972 - 30} = \frac{486 + 15}{972 + 30}$ .
- $\frac{63504}{91728} = \frac{63 - 504}{91 - 728} = \frac{63 + 504}{91 + 728}$ .
- $\frac{73264}{91580} = \frac{732 - 64}{915 - 80} = \frac{732 + 64}{915 + 80}$ .
- $\frac{48651}{97302} = \frac{4865 - 1}{9730 - 2} = \frac{4865 + 1}{9730 + 2}$ .
- $\frac{64732}{80915} = \frac{64 - 732}{80 - 915} = \frac{64 + 732}{80 + 915}$ .
- $\frac{73284}{91605} = \frac{7328 - 4}{9160 - 5} = \frac{7328 + 4}{9160 + 5}$ .
- $\frac{48732}{60915} = \frac{48 - 732}{60 - 915} = \frac{48 + 732}{60 + 915}$ .
- $\frac{67014}{89352} = \frac{6 - 7014}{8 - 9352} = \frac{6 + 7014}{8 + 9352}$ .
- $\frac{73684}{92105} = \frac{7368 - 4}{9210 - 5} = \frac{7368 + 4}{9210 + 5}$ .
- $\frac{50463}{71289} = \frac{504 - 63}{712 - 89} = \frac{504 + 63}{712 + 89}$ .
- $\frac{67124}{83905} = \frac{6712 - 4}{8390 - 5} = \frac{6712 + 4}{8390 + 5}$ .
- $\frac{74259}{86301} = \frac{74 - 259}{86 - 301} = \frac{74 + 259}{86 + 301}$ .
- $\frac{50463}{72891} = \frac{504 - 63}{728 - 91} = \frac{504 + 63}{728 + 91}$ .
- $\frac{68170}{94235} = \frac{68 - 170}{94 - 235} = \frac{68 + 170}{94 + 235}$ .
- $\frac{74816}{93520} = \frac{748 - 16}{935 - 20} = \frac{748 + 16}{935 + 20}$ .
- $\frac{51408}{79632} = \frac{51 - 408}{79 - 632} = \frac{51 + 408}{79 + 632}$ .
- $\frac{70146}{93528} = \frac{7014 - 6}{9352 - 8} = \frac{7014 + 6}{9352 + 8}$ .
- $\frac{75429}{80631} = \frac{754 - 29}{806 - 31} = \frac{754 + 29}{806 + 31}$ .
- $\frac{51408}{92736} = \frac{51 - 408}{92 - 736} = \frac{51 + 408}{92 + 736}$ .
- $\frac{70254}{81963} = \frac{702 - 54}{819 - 63} = \frac{702 + 54}{819 + 63}$ .
- $\frac{76184}{95230} = \frac{76 - 184}{95 - 230} = \frac{76 + 184}{95 + 230}$ .
- $\frac{54702}{63819} = \frac{54 - 702}{63 - 819} = \frac{54 + 702}{63 + 819}$ .
- $\frac{71236}{89045} = \frac{712 - 36}{890 - 45} = \frac{712 + 36}{890 + 45}$ .
- $\frac{76248}{95310} = \frac{76 - 248}{95 - 310} = \frac{76 + 248}{95 + 310}$ .
- $\frac{60195}{84273} = \frac{60 - 195}{84 - 273} = \frac{60 + 195}{84 + 273}$ .
- $\frac{71364}{89205} = \frac{7136 - 4}{8920 - 5} = \frac{7136 + 4}{8920 + 5}$ .
- $\frac{76328}{95410} = \frac{76 - 328}{95 - 410} = \frac{76 + 328}{95 + 410}$ .
- $\frac{62310}{97485} = \frac{62 - 310}{97 - 485} = \frac{62 + 310}{97 + 485}$ .
- $\frac{71624}{89530} = \frac{716 - 24}{895 - 30} = \frac{716 + 24}{895 + 30}$ .
- $\frac{78246}{90153} = \frac{782 - 46}{901 - 53} = \frac{782 + 46}{901 + 53}$ .
- $\frac{63124}{78905} = \frac{6312 - 4}{7890 - 5} = \frac{6312 + 4}{7890 + 5}$ .
- $\frac{71632}{89540} = \frac{716 - 32}{895 - 40} = \frac{716 + 32}{895 + 40}$ .

## 5 Symmetric Equivalent Fractions: Denominator with Six Digits

Whole the work given above is for the fractions where there are maximum five digits in the denominator. Below are some examples of *symmetric equivalent fractions* with denominator having 6 digits.

$$\bullet \frac{4023}{156897} = \frac{4 - 023}{156 - 897} = \frac{4 + 023}{156 + 897}.$$

$$\bullet \frac{5301}{487692} = \frac{53 - 01}{4876 - 92} = \frac{53 + 01}{4876 + 92}.$$

- $\frac{5403}{172896} = \frac{54 - 03}{1728 - 96} = \frac{54 + 03}{1728 + 96}.$       •  $\frac{8046}{132759} = \frac{8 - 046}{132 - 759} = \frac{8 + 046}{132 + 759}.$
- $\frac{5604}{137298} = \frac{56 - 04}{1372 - 98} = \frac{56 + 04}{1372 + 98}.$       •  $\frac{8701}{539462} = \frac{87 - 01}{5394 - 62} = \frac{87 + 01}{5394 + 62}.$
- $\frac{5703}{182496} = \frac{57 - 03}{1824 - 96} = \frac{57 + 03}{1824 + 96}.$       •  $\frac{9018}{267534} = \frac{9 - 018}{267 - 534} = \frac{9 + 018}{267 + 534}.$
- $\frac{5802}{194367} = \frac{58 - 02}{1943 - 67} = \frac{58 + 02}{1943 + 67}.$       •  $\frac{9018}{273546} = \frac{9 - 018}{273 - 546} = \frac{9 + 018}{273 + 546}.$
- $\frac{6201}{539487} = \frac{62 - 01}{5394 - 87} = \frac{62 + 01}{5394 + 87}.$       •  $\frac{9018}{327654} = \frac{9 - 018}{327 - 654} = \frac{9 + 018}{327 + 654}.$
- $\frac{6702}{194358} = \frac{67 - 02}{1943 - 58} = \frac{67 + 02}{1943 + 58}.$       •  $\frac{9028}{153476} = \frac{9 - 028}{153 - 476} = \frac{9 + 028}{153 + 476}.$
- $\frac{7014}{269538} = \frac{7 - 014}{269 - 538} = \frac{7 + 014}{269 + 538}.$       •  $\frac{9046}{153782} = \frac{9 - 046}{153 - 782} = \frac{9 + 046}{153 + 782}.$
- $\frac{7014}{293586} = \frac{7 - 014}{293 - 586} = \frac{7 + 014}{293 + 586}.$       •  $\frac{9102}{345876} = \frac{91 - 02}{3458 - 76} = \frac{91 + 02}{3458 + 76}.$
- $\frac{7014}{329658} = \frac{7 - 014}{329 - 658} = \frac{7 + 014}{329 + 658}.$       •  $\frac{9201}{487653} = \frac{92 - 01}{4876 - 53} = \frac{92 + 01}{4876 + 53}.$
- $\frac{7029}{154638} = \frac{7 - 029}{154 - 638} = \frac{7 + 029}{154 + 638}.$       •  $\frac{9603}{172854} = \frac{96 - 03}{1728 - 54} = \frac{96 + 03}{1728 + 54}.$
- $\frac{7056}{123984} = \frac{7 - 056}{123 - 984} = \frac{7 + 056}{123 + 984}.$       •  $\frac{9603}{182457} = \frac{96 - 03}{1824 - 57} = \frac{96 + 03}{1824 + 57}.$
- $\frac{7602}{345891} = \frac{76 - 02}{3458 - 91} = \frac{76 + 02}{3458 + 91}.$       •  $\frac{9804}{137256} = \frac{98 - 04}{1372 - 56} = \frac{98 + 04}{1372 + 56}.$
- $\frac{8027}{136459} = \frac{8 - 027}{136 - 459} = \frac{8 + 027}{136 + 459}.$

## 6 Subtractable Fraction

Above we have seen many fractions with positive and negative sign in the representation of same fraction. Below are some fractions just with subtraction operations. These are not valid just changing minus with plus, i.e., we don't have equivalent version with addition sign. Obviously, there are much more, but only few are written:

$$\bullet \frac{12}{4368} = \frac{1 - 2}{4 - 368}. \quad \bullet \frac{12}{5460} = \frac{1 - 2}{5 - 460}. \quad \bullet \frac{12}{8736} = \frac{1 - 2}{8 - 736}. \quad \bullet \frac{15}{2730} = \frac{1 - 5}{2 - 730}.$$

$$\begin{array}{llll}
 \bullet \frac{23}{4186} = \frac{2-3}{4-186}. & \bullet \frac{78}{9126} = \frac{7-8}{9-126}. & \bullet \frac{56}{20384} = \frac{5-6}{20-384}. & \bullet \frac{78}{43602} = \frac{7-8}{43-602}. \\
 \bullet \frac{24}{8736} = \frac{2-4}{8-736}. & \bullet \frac{79}{4108} = \frac{7-9}{4-108}. & \bullet \frac{59}{10738} = \frac{5-9}{10-738}. & \bullet \frac{78}{45630} = \frac{7-8}{45-630}. \\
 \bullet \frac{26}{3549} = \frac{2-6}{3-549}. & \bullet \frac{79}{8216} = \frac{7-9}{8-216}. & \bullet \frac{67}{30485} = \frac{6-7}{30-485}. & \bullet \frac{78}{65910} = \frac{7-8}{65-910}. \\
 \bullet \frac{36}{2184} = \frac{3-6}{2-184}. & \bullet \frac{23}{10465} = \frac{2-3}{10-465}. & \bullet \frac{68}{15470} = \frac{6-8}{15-470}. & \bullet \frac{79}{16432} = \frac{7-9}{16-432}. \\
 \bullet \frac{45}{8190} = \frac{4-5}{8-190}. & \bullet \frac{34}{21658} = \frac{3-4}{21-658}. & \bullet \frac{78}{29406} = \frac{7-8}{29-406}. & \bullet \frac{79}{32864} = \frac{7-9}{32-864}. \\
 \bullet \frac{46}{8372} = \frac{4-6}{8-372}. & \bullet \frac{35}{12740} = \frac{3-5}{12-740}. & \bullet \frac{78}{35490} = \frac{7-8}{35-490}. & \\
 \bullet \frac{48}{3276} = \frac{4-8}{3-276}. & \bullet \frac{45}{16380} = \frac{4-5}{16-380}. & \bullet \frac{78}{36504} = \frac{7-8}{36-504}. & \\
 \bullet \frac{69}{8372} = \frac{6-9}{8-372}. & \bullet \frac{45}{32760} = \frac{4-5}{32-760}. & \bullet \frac{78}{39546} = \frac{7-8}{39-546}. &
 \end{array}$$

The same is also true in case of addition, i.e., there are *addable fractions* valid only for addition not for subtraction, for example,

$$\bullet \frac{2046}{3751} = \frac{2+046}{37+51}. \quad \bullet \frac{208}{94536} = \frac{2+08}{9+4536}. \quad \bullet \frac{209}{14763} = \frac{2+09}{14+763}.$$

In the above three *addable fractions* if we replace addition by multiplication, the fractions are no more valid. For more fractions of this kind refer to Taneja [28].

## 7 More Subtraction Signs

There are *Selfie subtractable fractions* having more than one negative sign, for example,

$$\begin{array}{lll}
 \bullet \frac{912}{3648} = \frac{9-1-2}{36-4-8}. & \bullet \frac{3618}{5427} = \frac{3-6-1-8}{5-4-2-7}. & \bullet \frac{6031}{54279} = \frac{6-03-1}{54-27-9}. \\
 \bullet \frac{921}{3684} = \frac{9-2-1}{36-8-4}. & \bullet \frac{3028}{51476} = \frac{30-28}{51-4-7-6}. & \bullet \frac{6352}{80194} = \frac{63-5-2}{801-94}. \\
 \bullet \frac{932}{1864} = \frac{9-3-2}{18-6-4}. & \bullet \frac{4032}{58176} = \frac{40-3-2}{581-76}. & \bullet \frac{6354}{12708} = \frac{635-4}{1270-8}. \\
 \bullet \frac{1563}{2084} = \frac{15-6-3}{20-8-4}. & \bullet \frac{4036}{81729} = \frac{40-36}{81-7-2-9}. & \bullet \frac{7031}{56248} = \frac{7-03-1}{56-24-8}. \\
 & & \bullet \frac{7041}{56328} = \frac{7-04-1}{56-32-8}.
 \end{array}$$

$$\bullet \frac{7064}{91832} = \frac{70 - 64}{91 - 8 - 3 - 2}.$$

$$\bullet \frac{7634}{19085} = \frac{7 - 6 - 3 - 4}{1 - 9 - 0 - 8 - 5}.$$

$$\bullet \frac{8061}{72549} = \frac{8 - 06 - 1}{72 - 54 - 9}.$$

$$\bullet \frac{8132}{75649} = \frac{81 - 3 - 2}{756 - 49}.$$

$$\bullet \frac{9041}{63287} = \frac{9 - 04 - 1}{63 - 28 - 7}.$$

$$\bullet \frac{9071}{36284} = \frac{9 - 07 - 1}{36 - 28 - 4}.$$

$$\bullet \frac{9104}{63728} = \frac{9 - 1 - 04}{63 - 7 - 28}.$$

$$\bullet \frac{21835}{96074} = \frac{21 - 8 - 3 - 5}{96 - 074}.$$

$$\bullet \frac{41706}{95328} = \frac{41 - 7 - 06}{95 - 3 - 28}.$$

$$\bullet \frac{48513}{97026} = \frac{485 - 1 - 3}{970 - 2 - 6}.$$

$$\bullet \frac{48732}{60915} = \frac{48 - 7 - 3 - 2}{60 - 9 - 1 - 5}.$$

$$\bullet \frac{54918}{62037} = \frac{549 - 1 - 8}{620 - 3 - 7}.$$

More study of these type of fractions shall be dealt elsewhere.

## Acknowledgement

The author is thankful to T.J. Eckman, Georgia, USA (email: [jeek@jeek.net](mailto:jeek@jeek.net)) in programming the script to develop these representations.

## References

- [1] ABRAHAMS, M., Lots more numbers, deemed "crazy consecutive", IMPROBABLE RESEARCH, <http://www.improbable.com/2013/06/08/lots-more-numbers-deemed-crazy-consecutive>.
- [2] DUDENEY, H.E., Amusements in Mathematics, EBD E-Books Directory.com, 1917.
- [3] KEITH, M., Dottable Fractions, 1998, <http://www.cadaeic.net/dottable.htm>.
- [4] KEITH, M., Generalized Fractured Fractions, *J. Rec. Math.*, 12(4), pp. 273-276, 1979-80.
- [5] MADACHY, J.S., Mathematics on Vacations, Charlers Scriber's Son, New York, 1966.
- [6] NEBUS, J., Counting From 52 to 11,108, nebusresearch, <http://nebusresearch.wordpress.com/2013/06/10/counting-from-52-to-11108/>.
- [7] TANEJA, I.J., Crazy Sequential Representation: Numbers from 0 to 11111 in terms of Increasing and Decreasing Orders of 1 to 9, <http://arxiv.org/abs/1302.1479>.
- [8] TANEJA, I.J., Selfie Numbers: Consecutive Representations in Increasing and Decreasing Orders, RGMIA Research Report Collection, 17(2014), Article 140, pp. 1-57. <http://rgmia.org/papers/v17/v17a140.pdf>, 2014.
- [9] TANEJA, I.J., Single Digit Representations of Natural Numbers, <http://arxiv.org/abs/1502.03501>. Also in RGMIA Research Report Collection, 18(2015), Article 15, pp. 1-55. <http://rgmia.org/papers/v18/v18a15.pdf>.
- [10] TANEJA, I.J., Running Expressions in Increasing and Decreasing Orders of Natural Numbers Separated by Equality Signs, RGMIA Research Report Collection, 18(2015), Article 27, pp. 1-54. <http://rgmia.org/papers/v18/v18a27.pdf>, 2015.
- [11] TANEJA, I.J., Single Letter Representations of Natural Numbers, Palindromic Symmetries and Number Patterns, RGMIA Research Report Collection, 18(2015), Article 40, pp. 1-30. <http://rgmia.org/papers/v18/v18a40.pdf>.
- [12] TANEJA, I.J., Different Types of Pretty Wild Narcissistic Numbers: Selfie Representations – I, RGMIA Research Report Collection, 18(2015), Article 32, pp. 1-43. <http://rgmia.org/papers/v18/v18a32.pdf>.
- [13] TANEJA, I.J., Selfie Numbers: Representations in Increasing and Decreasing Orders of Non Consecutive Digits, RGMIA Research Report Collection, 18(2015), Article 70, pp. 1-104. <http://rgmia.org/papers/v18/v18a70.pdf>.

- [14] TANEJA, I.J., Single Letter Representations of Natural Numbers, RGMIA Research Report Collection, 18(2015), Article 73, pp. 1-44. <http://rgmia.org/papers/v18/v18a73.pdf>.
- [15] TANEJA, I.J., Representations of Palindromic, Prime, and Fibonacci Sequence Patterns, RGMIA Research Report Collection, 18(2015), Article 99, pp. 1-24. <http://rgmia.org/papers/v18/v18a99.pdf>.
- [16] TANEJA, I.J., Crazy Representations and Selfie Numbers, RGMIA Research Report Collection, 18(2015), Article 141, pp. 1-9. <http://rgmia.org/papers/v18/v18a141.pdf>.
- [17] TANEJA, I.J., Unified Selfie Numbers, RGMIA Research Report Collection, 18(2015), Article 153, pp. 1-14. <http://rgmia.org/papers/v18/v18a153.pdf>.
- [18] TANEJA, I.J., Patterns in Selfie Numbers, RGMIA Research Report Collection, 18(2015), Article 154, pp. 1-41. <http://rgmia.org/papers/v18/v18a154.pdf>.
- [19] TANEJA, I.J., Selfie Numbers – I: Six Digits Symmetrical, Unified and Patterned Representations Without Factorial, RGMIA Research Report Collection, 18(2015), Article 174, pp. 1-94, <http://rgmia.org/papers/v18/v18a174.pdf>.
- [20] TANEJA, I.J., Selfie Numbers – II: Six Digits Symmetrical, Unified and Patterned Representations Without Factorial, RGMIA Research Report Collection, 18(2015), Article 175, pp. 1-41, <http://rgmia.org/papers/v18/v18a175.pdf>.
- [21] TANEJA, I.J., Selfie Power Representations, RGMIA Research Report Collection, 19(2016), Article 17, pp. 1-20, <http://rgmia.org/papers/v19/v19a17.pdf>.
- [22] TANEJA, I.J., Crazy Power Representations of Natural Numbers, RGMIA Research Report Collection, 19(2016), Art 31, pp. 1-71, <http://rgmia.org/papers/v19/v19a31.pdf>.
- [23] TANEJA, I.J., Flexible Power Narcissistic Numbers with Division, RGMIA Research Report Collection, 19(2016), Art 32, pp. 1-67, <http://rgmia.org/papers/v19/v19a32.pdf>.
- [24] TANEJA, I.J., Double Sequential Representations of Natural Numbers – I, RGMIA Research Report Collection, 19(2016), Art 48, pp. 1-65, <http://rgmia.org/papers/v19/v19a48.pdf>.
- [25] TANEJA, I.J., Flexible Power Selfie Numbers – I, RGMIA Research Report Collection, 19(2016), Art 49, pp. 1-34, <http://rgmia.org/papers/v19/v19a49.pdf>.
- [26] TANEJA, I.J., Flexible Power Selfie Numbers – II, RGMIA Research Report Collection, 19(2016), Art 50, pp. 1-69, <http://rgmia.org/papers/v19/v19a50.pdf>.
- [27] TANEJA, I.J., Flexible Power Selfie Numbers – III, RGMIA Research Report Collection, 19(2016), Art 51, pp. 1-66, <http://rgmia.org/papers/v19/v19a51.pdf>.
- [28] TANEJA, I.J., Selfie Fractions: Addable, RGMIA Research Report Collection, 19(2016), pp. 1-25, <http://rgmia.org/v19.php>.
- [29] TANEJA, I.J., Selfie Fractions: Dottable and Pontentiable, RGMIA Research Report Collection, 19(2016), pp. 1-25, <http://rgmia.org/v19.php>.
- [30] TANEJA, I.J., Selfie Fractions: Addable and Dottable Together, RGMIA Research Report Collection, 19(2016), pp. 1-80, <http://rgmia.org/v19.php>.
- [31] TANEJA, I.J., Equivalent Selfie Fractions: Addable and Dottable Together, RGMIA Research Report Collection, 19(2016), pp. 1-85, <http://rgmia.org/v19.php>.