

**ADD/SUBTRACT/MULTIPLY/DIVIDE COMPLEX FRACTIONS EXERCISES
ANSWER KEY**

Addition:

1. $3 \frac{2}{6} + 7 \frac{1}{6} = 10 \frac{3}{6} = 10 \frac{1}{2}$

2. $20 \frac{1}{3} + 5 \frac{1}{6} = 25 + \frac{2}{6} + \frac{1}{6} = 25 \frac{3}{6} = 25 \frac{1}{2}$

3. $11 \frac{2}{6} + 14 \frac{2}{5} = 11 \frac{10}{30} + 14 \frac{12}{30} = 25 \frac{22}{30} = 25 \frac{11}{15}$

4. $161 \frac{2}{9} + 100 \frac{1}{7} = 261 \frac{14}{63} + \frac{9}{63} = 261 \frac{23}{63}$

Subtraction:

1. $10 \frac{5}{6} - 5 \frac{1}{6} = 5 \frac{4}{6} = 5 \frac{2}{3}$

2. $24 \frac{9}{14} - 12 \frac{3}{7} = 12 \frac{9}{14} - \frac{6}{14} = 12 \frac{3}{14}$

3. $30 \frac{2}{3} - 14 \frac{3}{7} = 16 \frac{14}{21} - \frac{9}{21} = 16 \frac{5}{21}$

4. $9 \frac{2}{5} - 3 \frac{1}{10} = 6 \frac{4}{10} - \frac{1}{10} = 6 \frac{3}{10}$

Multiplication:

1. $\frac{3}{5} \times 10 = \frac{3}{5} \times \frac{10}{1} = \frac{30}{5} = 6$

2. $4 \frac{1}{6} \times \frac{2}{3} = \frac{25}{6} \times \frac{2}{3} = \frac{50}{18} = 2 \frac{14}{18} = 2 \frac{7}{9}$

3. $\frac{2}{7} \times 2 \frac{2}{9} = \frac{16}{7} \times \frac{20}{9} = \frac{320}{63} = 5 \frac{5}{63}$

4. $10 \frac{6}{7} \times 3 \frac{4}{9} = \frac{76}{7} \times \frac{31}{9} = \frac{2,356}{63} = 37 \frac{25}{63}$

Division:

1. $\frac{1}{3} \div \frac{1}{4} = \frac{1}{3} \times \frac{4}{1} = \frac{4}{3} = 1 \frac{1}{3}$

2. $4 \frac{1}{2} \div \frac{1}{3} = \frac{9}{2} \times \frac{3}{1} = \frac{27}{2} = 13 \frac{1}{2}$

3. $10 \div \frac{3}{10} = 10 \frac{10}{3} = \frac{100}{3} = 33 \frac{1}{3}$

4. $6 \frac{1}{3} \div 2 \frac{1}{5} = \frac{19}{3} \times \frac{5}{11} = \frac{95}{33} = 2 \frac{29}{33}$