

## 2.1.2 Adding and Subtracting Rational Numbers (Fractions) Worksheet

Try the first 5 questions from each section (A-C). When you are done please check your answers. **If you have done all 5 correctly** with proper work show to justify your answer you may go on to the next section and repeat the process. If you are not able to complete all 5 correctly please try another 5 questions in the same section. Complete as many as possible. When you get to section D please do all of the questions.

### Section A:

1.  $\frac{3}{2} + \frac{-4}{2}$

2.  $\frac{-5}{8} + \frac{7}{8}$

3.  $-\frac{11}{12} + -\frac{7}{12}$

4.  $-\frac{11}{9} + \frac{5}{9}$

5.  $\frac{-13}{15} + \frac{-12}{15}$

6.  $\frac{-5}{16} + \frac{-7}{16}$

7.  $\frac{17}{48} + \frac{-14}{48}$

8.  $-\frac{5}{9} + \frac{-3}{9}$

9.  $-\frac{8}{13} + \frac{5}{13}$

10.  $\frac{15}{23} + \left(-\frac{17}{23}\right)$

11.  $\frac{4}{5} + \frac{-1}{5}$

12.  $\frac{-5}{11} + \frac{-4}{11}$

13.  $\frac{8}{13} + \left(-\frac{5}{13}\right)$

14.  $\frac{4}{3} + \frac{-2}{3}$

15.  $\left(-\frac{5}{16}\right) + \left(-\frac{7}{16}\right)$

### Section B:

1.  $\frac{3}{5} - \frac{2}{5}$

2.  $\left(-\frac{2}{3}\right) - \frac{2}{3}$

3.  $-\frac{1}{10} - \left(-\frac{7}{10}\right)$

4.  $\frac{5}{18} - \left(-\frac{7}{18}\right)$

5.  $-\frac{6}{45} - \left(-\frac{9}{45}\right)$

6.  $\frac{7}{11} - \frac{5}{11}$

7.  $\left(-\frac{5}{8}\right) - \left(-\frac{3}{8}\right)$

8.  $\frac{5}{13} - \left(-\frac{7}{13}\right)$

9.  $\left(-\frac{9}{21}\right) - \frac{8}{21}$

10.  $\frac{5}{42} - \frac{9}{42}$

11.  $\left(-\frac{5}{7}\right) - \left(-\frac{2}{7}\right)$

12.  $\frac{13}{30} - \frac{21}{30}$

13.  $-\frac{8}{11} - \left(-\frac{5}{11}\right)$

14.  $-\frac{15}{31} - \frac{20}{31}$

15.  $\frac{2}{7} - \left(-\frac{9}{7}\right)$

**Section C:**

1.  $\frac{2}{3} + \frac{-1}{4}$

4.  $-\frac{4}{5} + \frac{3}{4}$

6.  $\frac{5}{6} + \frac{-7}{12}$

9.  $\left(-\frac{1}{4}\right) - \left(-\frac{7}{9}\right)$

11.  $-\frac{11}{12} + \frac{-5}{8}$

14.  $-\frac{13}{15} - \left(-\frac{3}{10}\right)$

2.  $-\frac{4}{5} + \frac{1}{2}$

5.  $\frac{1}{5} - \left(-\frac{2}{3}\right)$

7.  $\frac{5}{6} - \frac{3}{4}$

10.  $-\frac{2}{5} + \frac{11}{15}$

12.  $\frac{-1}{16} + \frac{2}{3}$

15.  $\frac{7}{10} - \frac{1}{4}$

3.  $-\frac{1}{3} - \frac{7}{8}$

8.  $-\frac{9}{10} + \left(-\frac{1}{6}\right)$

13.  $\frac{1}{2} - \frac{4}{9}$

**Section D:**

1.  $2\frac{2}{3} + \left(-1\frac{1}{2}\right)$

4.  $9\frac{1}{9} - \frac{5}{6}$

7.  $4\frac{1}{4} - \left(-2\frac{2}{5}\right)$

10.  $7\frac{5}{12} + \left(-7\frac{7}{8}\right)$

13.  $1\frac{1}{2} - 6\frac{7}{9}$

16.  $-4\frac{1}{2} - \left(-6\frac{2}{5}\right)$

19.  $-2\frac{1}{4} - 4\frac{1}{3}$

22.  $4\frac{1}{8} - 1\frac{3}{4}$

25.  $3\frac{2}{5} - \left(-5\frac{5}{6}\right)$

2.  $-5\frac{5}{6} - \left(-2\frac{3}{5}\right)$

5.  $5\frac{3}{4} + 1\frac{11}{15}$

8.  $-7\frac{1}{8} + 4\frac{3}{4}$

11.  $4\frac{5}{8} + \frac{2}{3}$

14.  $-2\frac{3}{4} - 6\frac{5}{9}$

17.  $\frac{11}{15} + \left(-5\frac{1}{2}\right)$

20.  $-5\frac{1}{2} - \left(-1\frac{1}{6}\right)$

23.  $-6\frac{2}{3} - \left(-8\frac{1}{5}\right)$

26.  $-4\frac{1}{2} - \left(-2\frac{3}{5}\right)$

3.  $-2\frac{1}{3} + -2\frac{3}{10}$

6.  $\frac{-7}{8} - 4\frac{4}{5}$

9.  $1\frac{5}{6} - \left(-3\frac{7}{8}\right)$

12.  $-3\frac{1}{3} + \left(-3\frac{5}{16}\right)$

15.  $-1\frac{3}{4} + 5\frac{1}{6}$

18.  $-6 + 6\frac{1}{8}$

21.  $6\frac{3}{4} - \left(-2\frac{4}{5}\right)$

24.  $-7\frac{1}{4} - 1\frac{7}{9}$

27.  $\frac{1}{6} - 6\frac{7}{8}$

**Answers:**

**Section A:**

1.  $-\frac{1}{2}$       2.  $\frac{1}{4}$       3.  $-1\frac{1}{2}$       4.  $-\frac{2}{3}$       5.  $-1\frac{2}{3}$   
 6.  $-\frac{3}{4}$     7.  $\frac{1}{16}$       8.  $-\frac{8}{9}$     9.  $-\frac{3}{13}$     10.  $-\frac{2}{23}$   
 11.  $\frac{3}{5}$       12.  $-\frac{9}{11}$       13.  $\frac{3}{13}$       14.  $\frac{2}{3}$       15.  $-\frac{3}{4}$

**Section B:**

1.  $\frac{1}{5}$       2.  $-1\frac{1}{3}$       3.  $\frac{3}{5}$       4.  $\frac{2}{3}$       5.  $\frac{1}{15}$   
 6.  $\frac{2}{11}$       7.  $-\frac{1}{4}$       8.  $\frac{12}{13}$       9.  $-\frac{17}{21}$       10.  $-\frac{2}{21}$   
 11.  $-\frac{3}{7}$       12.  $-\frac{4}{15}$       13.  $-\frac{3}{11}$       14.  $-1\frac{4}{31}$       15.  $1\frac{4}{7}$

**Section C:**

1.  $\frac{5}{12}$       2.  $-\frac{3}{10}$       3.  $-1\frac{5}{24}$       4.  $-\frac{1}{20}$       5.  $\frac{13}{15}$   
 6.  $\frac{1}{4}$       7.  $\frac{1}{12}$       8.  $-1\frac{1}{15}$       9.  $\frac{19}{36}$       10.  $\frac{1}{3}$   
 11.  $-1\frac{13}{24}$     12.  $\frac{29}{48}$       13.  $\frac{1}{18}$       14.  $-\frac{17}{30}$       15.  $\frac{9}{20}$

**Section D:**

1.  $1\frac{1}{6}$       2.  $-3\frac{7}{30}$       3.  $-4\frac{19}{30}$       4.  $8\frac{5}{18}$       5.  $7\frac{29}{60}$   
 6.  $-5\frac{27}{40}$     7.  $6\frac{13}{20}$       8.  $-2\frac{3}{8}$       9.  $5\frac{17}{24}$       10.  $-\frac{11}{24}$   
 11.  $5\frac{7}{24}$       12.  $-6\frac{31}{48}$       13.  $-5\frac{5}{18}$       14.  $-9\frac{11}{36}$       15.  $3\frac{5}{12}$   
 16.  $1\frac{9}{10}$       17.  $-4\frac{23}{30}$       18.  $\frac{1}{8}$       19.  $-6\frac{7}{12}$       20.  $-4\frac{1}{3}$   
 21.  $9\frac{11}{20}$       22.  $2\frac{3}{8}$       23.  $1\frac{8}{15}$       24.  $-9\frac{1}{36}$       25.  $9\frac{7}{30}$   
 26.  $-1\frac{9}{10}$       27.  $-5\frac{2}{3}$