

Adding and Subtracting Rational Numbers

1. Evaluate each expression. Write your answers in lowest terms.

a) $\frac{3}{8} - \frac{2}{3} - \frac{1}{2}$ b) $\frac{3}{4} - \frac{2}{4}$ c) $\frac{5}{6} - \frac{-1}{3}$ d) $\frac{1}{2} + \frac{1}{3}$
e) $\frac{2}{3} - \frac{1}{6}$ f) $\frac{1}{2} - \frac{1}{3}$ g) $\frac{3}{4} + \frac{1}{3} - \frac{5}{6}$ h) $1\frac{3}{4} + 2\frac{1}{3}$
i) $1\frac{3}{8} - \frac{3}{4}$ j) $\frac{7}{8} - \frac{1}{3} - \frac{1}{4}$

2. Evaluate each expression. Write your answers in lowest terms. Watch the brackets!

a) $\frac{1}{3} + \left(\frac{-2}{3}\right)$ b) $3 - \frac{2}{3}$ c) $-\frac{2}{3} + \left(-\frac{3}{5}\right)$ d) $-\frac{1}{4} - \frac{1}{2}$
e) $\frac{3}{8} - \left(-\frac{1}{4}\right)$ f) $-\frac{3}{5} + \frac{3}{10}$ g) $-\frac{5}{3} - \left(-\frac{5}{2}\right)$ h) $\frac{1}{6} - \frac{3}{4} + \frac{1}{3}$
i) $-\frac{2}{3} + \frac{-6}{5}$ j) $\left(1\frac{3}{4}\right) + \left(-1\frac{1}{5}\right) - \left(-\frac{5}{2}\right)$

Evaluating Expressions

Use BEDMAS to evaluate each expression. Write your answer in lowest terms.

1. $\frac{3}{4} \times \frac{5}{6} + \frac{1}{2}$ 2. $\frac{2}{3} \times \left(\frac{1}{5} \div \frac{2}{5}\right)$ 3. $3 - \frac{5}{6} \div \frac{1}{3}$
4. $\frac{1}{2} - \frac{1}{3} \times \frac{12}{5}$ 5. $\frac{9}{10} \times 20 \div \frac{1}{3}$ 6. $-\frac{2}{3} \times \frac{1}{2} \div (-2)$
7. $\frac{3}{2} \div \left(-\frac{1}{6}\right) \times \frac{1}{3}$ 8. $\frac{2}{3} \times \frac{5}{8} + \frac{2}{3} \times \left(-\frac{1}{8}\right)$ 9. $\frac{9}{8} + \left(-\frac{1}{4}\right) \times 3$
10. $\left(\frac{1}{2} + \frac{1}{3}\right) \div \left(\frac{1}{4} \div \frac{1}{3}\right)$ 11. $\left(-\frac{4}{7}\right) \div \left(-\frac{12}{7}\right) - \frac{1}{3}$ 12. $4\frac{1}{2} \times \left(-\frac{2}{3}\right) + \frac{7}{8}$
13. $\frac{4}{9} + \frac{-3}{4} \times \frac{2}{9} \div \frac{3}{5}$ 14. $\frac{1}{3} \times \frac{5}{8} + \frac{1}{4} \times \left(\frac{-1}{2}\right)$

Answers to adding and subtracting. 1.a) $\frac{-19}{24}$ b) $\frac{1}{4}$ c) $\frac{7}{6}$ d) $\frac{5}{6}$ e) $\frac{1}{2}$ f) $\frac{1}{6}$
g) $\frac{1}{4}$ h) $\frac{49}{12}$ i) $\frac{5}{8}$ j) $\frac{7}{24}$ 2.a) $-\frac{1}{3}$ b) $\frac{7}{3}$ c) $-\frac{19}{15}$ d) $-\frac{3}{4}$ e) $\frac{5}{8}$ f) $-\frac{3}{10}$ g) $\frac{5}{6}$
h) $-\frac{1}{4}$ i) $-\frac{28}{15}$ j) $\frac{61}{20}$

Answers to evaluating expressions. 1. $\frac{9}{8}$ 2. $\frac{1}{3}$ 3. $\frac{1}{2}$ 4. $-\frac{3}{10}$ 5. 54 6. $\frac{1}{6}$
7. -3 8. $\frac{1}{3}$ 9. $\frac{3}{8}$ 10. $\frac{10}{9}$ 11. 0 12. $-\frac{17}{8}$ 13. $\frac{1}{6}$ 14. $\frac{1}{12}$