



Grade 7

Topic: Adding and Subtracting Rational Numbers

Instructions

Solve the following problems. Show all work clearly and check your solutions.

Practice Problems

1. Add or subtract the following rational numbers.

- | | |
|-------------------------------------|-----------------------------------|
| (i) $\frac{3}{4} + \frac{5}{8}$ | (iv) $-\frac{2}{3} + \frac{1}{6}$ |
| (ii) $\frac{-7}{12} + \frac{5}{12}$ | (v) $\frac{5}{9} - \frac{-2}{9}$ |
| (iii) $\frac{9}{10} - \frac{4}{5}$ | (vi) $-\frac{7}{8} - \frac{1}{4}$ |

2. Simplify the following expressions.

- | | |
|-------------------------------------|-------------------------------------|
| (i) $\frac{2}{5} + \frac{-3}{10}$ | (iii) $\frac{7}{12} - \frac{9}{12}$ |
| (ii) $\frac{-11}{15} + \frac{4}{5}$ | (iv) $-\frac{5}{6} + \frac{2}{3}$ |

3. Word Problems.

- (i) Sara had $\frac{3}{4}$ of a pizza. She ate $\frac{2}{5}$ of it. How much pizza is left?
- (ii) A submarine was at -300 meters. It ascended 150 meters. What is its new position?
- (iii) John owed his friend $\$25$ and borrowed another $\$15$. What is his total debt?

4. Mixed Review.

- (i) $2 + (-5)$
- (ii) $-3.5 + 4.2$
- (iii) $6 - (-2.4)$
- (iv) $-7 + (-8)$

Multiple-Choice Questions

1. $\frac{5}{6} - \frac{1}{2} =$
 - A. $\frac{1}{3}$
 - B. $\frac{2}{3}$
 - C. $\frac{5}{12}$
 - D. $\frac{1}{2}$
2. $-2 + 5 =$
 - A. 7
 - B. 3
 - C. -3
 - D. -7
3. Which is the correct result? $-4 - (-7)$
 - A. 3
 - B. -3
 - C. -11
 - D. 11
4. $\frac{-9}{10} + \frac{2}{5} =$
 - A. $\frac{-1}{2}$
 - B. $\frac{-1}{5}$
 - C. $\frac{-5}{10}$
 - D. $\frac{-9}{5}$

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