Unit 0: Review

Lesson 1: Integer Review

Add

- Same sign: add and keep the sign
  $-3 + (-2) = -5$
- different sign: subtract and keep sign of larger magnitude
  $-4 + 8 = 4$
  $2 + (-7) = -5$

Subtract

- Use CCO first!
  * Copy Change Opposite *
- Then follow addition rules

$5 - (-15) = ?$
C C O
$5 + 15 = ?$
$5 + 15 = 20$

Integers
whole numbers and their opposites

Multiply

- Same sign: answer is positive
  $2 \times 5 = 10$
  $-2 \times -5 = 10$
- different sign: answer is negative
  $3 \times (-3) = -9$
  $(-3) \times 3 = -9$

Divide

- Same sign: answer is positive
  $\frac{15}{3} = 5$
  $\frac{-15}{-3} = 5$
- different sign: answer is negative
  $\frac{-27}{9} = -3$ $\frac{27}{-9} = -3$

Decimal and Fraction Practice

Add

1. $-3.5 + 0.8 = -2.7$

$$\begin{array}{r} 3.^{2}5^{15} \\ -\ 0.8 \\ \hline 2.7 \end{array}$$

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

$\frac{9}{12} + \frac{8}{12} = \frac{17}{12}$ or $1\frac{5}{12}$

Subtract

3. $\underset{C}{8.4} - \underset{C}{(-2.7)} = \underset{O}{\quad}$

$8.4 + 2.7 = 11.1$

$$\begin{array}{r} {}^{1}8.4 \\ +\ 2.7 \\ \hline 11.1 \end{array}$$

4. $\underset{C}{\frac{1}{2}} - \underset{C}{\frac{5}{6}} \quad \underset{O}{\quad}$

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

$\frac{3}{6} + \left(-\frac{5}{6}\right) = -\frac{2}{6} = -\frac{1}{3}$

Multiply

5. $5.6 \times (-3.2) = -17.92$

$$\begin{array}{r} {}^{1}5.6 \\ \times\ 3.2 \\ \hline 112 \\ 1680 \\ \hline 17.92 \end{array}$$

6. $-\frac{2}{3} \times -\left(\frac{1}{2}\right) = \frac{2}{6} = \frac{1}{3}$

Divide

7. $\left(-\frac{2}{3}\right) \div \frac{7}{8}$

$-\frac{2}{3} \times \frac{8}{7} = -\frac{16}{21}$

8. $-\frac{6}{5} \div -\frac{10}{11}$

$-\frac{6}{5} \times -\frac{11}{10} = \frac{66}{50}$