

What does $3(5)$ mean?

$$3 \text{ groups of } 5 \quad \text{or} \quad 5 + 5 + 5$$

$$\boxed{15}$$

What does $5(3)$ mean?

$$5 \text{ groups of } 3 \quad \text{or} \quad 3 + 3 + 3 + 3 + 3$$

$$\boxed{15}$$

What does $3(-5)$ mean?

$$3 \text{ groups of } -5 \quad \text{or} \quad \underbrace{-5 + (-5) + (-5)}_{-10 + (-5)}$$

$$\textcircled{-15}$$

What does $-5(3)$ mean?

$$\text{the opposite of } 5 \text{ groups of } 3$$

$$- \{ 3 + 3 + 3 + 3 + 3 \}$$

$$\boxed{-15}$$

What does $-3(-5)$ mean?

$$\text{the opposite of } 3 \text{ groups of } (-5)$$

$$- \{ -5 + (-5) + (-5) \}$$

$$- \{ -15 \}$$

$$\boxed{15}$$

What is the sign of the answer to a multiplication or division problem?

The product or quotient of TWO numbers with the same signs is positive.

$$\begin{array}{cc} (+)(+) & (-)(-) & \frac{(+)}{(+)} & \frac{(-)}{(-)} \end{array}$$

The product or quotient of TWO numbers with different signs is negative.

$$\begin{array}{cc} (+)(-) & (-)(+) & \frac{(+)}{(-)} & \frac{(-)}{(+)} \end{array}$$

Ex 1: $\frac{-10}{5}$

$$\boxed{-2}$$

Ex 2: $(-2)(-3)$

$$\boxed{6}$$

Ex 3: $\frac{2(6)}{4}$

$$\frac{-12}{-4}$$

$$\boxed{3}$$

Ex 4: $\frac{-7-2(-3)}{\frac{1}{2}}$

$$\frac{-7-(-6)}{\frac{1}{2}}$$

$$\frac{-7+6}{\frac{1}{2}}$$

$$\frac{-1}{\frac{1}{2}}$$

$$-1 \div \left(\frac{1}{2}\right)$$

$$\begin{array}{l} \rightarrow -1(2) \\ \textcircled{-2} \end{array}$$

$$\begin{aligned} \text{Ex 5: } & -\frac{1}{4} \div \frac{1}{3} \\ & -\frac{1}{4} \left(\frac{3}{1} \right) \\ & \boxed{-\frac{3}{4}} \end{aligned}$$

$$\begin{aligned} \text{Ex 6: } & 10 \div \frac{1}{2} - 16 \left(\frac{3}{4} \right) \\ & 10(2) - 16 \left(\frac{3}{4} \right) \\ & 20 - 12 \\ & \boxed{8} \end{aligned}$$

$$\begin{aligned} \text{Ex 7: } & \frac{4}{5} \div \left(-\frac{1}{6} \right) \left(\frac{3}{4} \right) \\ & \frac{4}{5} \left(-\frac{6}{1} \right) \left(\frac{3}{4} \right) \\ & -\frac{624}{5} \left(\frac{3}{4} \right) \\ & \boxed{-\frac{18}{5}} \end{aligned}$$

$$\begin{aligned} \text{Ex 8: } & -m(-4m) \\ & 4mm \\ & \boxed{4m^2} \end{aligned}$$

$$\begin{aligned} \text{Ex 9: } & -36x \div \frac{2}{3} \\ & -36x \left(\frac{3}{2} \right) \\ & \boxed{-54x} \end{aligned}$$

$$\begin{aligned} \text{Ex 10: } & \frac{2}{3}(-15) \left(1\frac{1}{2} \right) (-4y) \\ & -10 \left(\frac{3}{2} \right) (-4y) \\ & -15(-4y) \\ & \boxed{60y} \end{aligned}$$

Evaluate each expression if $x = -6$ and $y = 3$.

Ex 11: $\frac{2x - y}{y^2}$

$$\frac{2(-6) - 3}{3^2}$$

$$\frac{-12 - 3}{9}$$

$$\frac{-12 + (-3)}{9}$$

$$\frac{-15}{9}$$

$$\boxed{-\frac{5}{3}}$$

Ex 12: $\frac{y - x^2}{x - 5}$

$$\frac{3 - (-6)^2}{-6 - 5}$$

$$\frac{3 - 36}{-6 + (-5)}$$

$$\frac{3 + (-36)}{-11}$$

$$\frac{-33}{-11}$$

$$3$$

$$\boxed{3}$$

Assignment #6

Part I: p. 91-92 #3-17 odd, 29-35 odd, 36-39, 45-48, 50-51

Part II: p. 106-107 #11-21 odd, 44-47

Correct the Pre-Alg Review Test
and get it signed!!