

Order of Operations and Distributive Property Practice

1. Use the distributive property to write an expression equal to each of the following expression.

a. $-3(7 + -4)$

$$-3 \cdot 7 + -3 \cdot -4$$

b. $(-3 \cdot -2) - (-3 \cdot 7)$

$$-3(-2 - 7)$$

2. After soccer practice, Eli buys a sports drink and granola bar for his 3 friends. The sports drinks cost \$2.50 each, and the granola bars cost \$1.25 each.

a. Using your understanding of the distributive property, write TWO equivalent number sentences (one factored and one expanded) that would find the total cost for all four people.

$$4(2.50 + 1.25)$$

$$4 \cdot 2.50 + 4 \cdot 1.25$$

b. What is the total cost for all four people? Show your work and include units.

$$\begin{array}{r} 2.50 \\ + 1.25 \\ \hline 3.75 \end{array}$$

$$\begin{array}{r} 3.75 \\ \times 4 \\ \hline 15.00 \end{array}$$

$$\text{\$15}$$

Use what you know about rational numbers and Order of Operations to evaluate the expressions below. Remember: ONE operation per step and show ALL steps!!!

1. $(-7 + 4 \cdot 6) - 8$

$$\underline{(-7 + 24)} - 8$$

$$17 - 8$$

$$\text{\textcircled{9}}$$

2. $-6 + 9 \div -3 \cdot 5$

$$-6 + \underline{-3 \cdot 5}$$

$$-6 + -15$$

$$\text{\textcircled{-21}}$$

3. $\frac{1}{2} \cdot (-16 - 4) + 2\frac{1}{3}$

$$\underline{\frac{1}{2} \cdot (-20)} + 2\frac{1}{3}$$

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

$$-\frac{30}{3} + \frac{7}{3}$$

$$\text{\textcircled{-\frac{23}{3}}} \text{ or } \text{\textcircled{-7\frac{2}{3}}}$$

4. $-4.2 \cdot -0.2 + 3 \cdot -4.3$

$$0.84 + \underline{3 \cdot -4.3}$$

$$0.84 + -12.9$$

$$\text{\textcircled{-12.06}}$$

$$\begin{array}{r} 4.2 \\ \times 0.2 \\ \hline .84 \end{array}$$

$$\begin{array}{r} 4.3 \\ \times 3 \\ \hline 12.9 \end{array}$$

$$\begin{array}{r} 12.9 \\ - 0.84 \\ \hline 12.06 \end{array}$$