

Day 1 – Order of Operations Practice

1. Evaluate each of the following expressions:

$$\begin{aligned} \text{a. } & 35 - (17 - 2) \div 5 \\ & = 35 - 15 \div 5 \\ & = 35 - 3 \\ & = \boxed{32} \end{aligned}$$

$$\begin{aligned} \text{d. } & 4(9 - 3) \div (8 - 2) \\ & = 4(6) \div 6 \\ & = 24 \div 6 \\ & = \boxed{4} \end{aligned}$$

$$\begin{aligned} \text{b. } & 24 - 9 \cdot 2 + 6 \div 3 \\ & = 24 - 18 + 6 \div 3 \\ & = 24 - 18 + 2 \\ & = 6 + 2 \\ & = \boxed{8} \end{aligned}$$

$$\begin{aligned} \text{e. } & 26 - [(25 - 11) - 2^3] \\ & = 26 - [14 - 8] \\ & = 26 - 6 \\ & = \boxed{20} \end{aligned}$$

$$\begin{aligned} \text{c. } & 12(2 + 7) - 24 \div 12 \\ & = 12(9) - 24 \div 12 \\ & = 108 - 24 \div 12 \\ & = 108 - 2 \\ & = \boxed{106} \end{aligned}$$

$$\begin{aligned} \text{f. } & \frac{5(16 - 5) - 1}{4^2 - 7} \\ & = \frac{5(11) - 1}{16 - 7} \\ & = \frac{55 - 1}{9} \\ & = \frac{54}{9} = \boxed{6} \end{aligned}$$

2. Describe the error in evaluating the expression when $m = 8$.

X

$$\begin{aligned} 5m + 3 &= 5 \cdot 8 + 3 \\ &= 5 \cdot 11 \\ &= 55 \end{aligned}$$

They did addition before multiplication.

$$\begin{aligned} &= 5 \cdot 8 + 3 \\ &= 40 + 3 \\ &= \boxed{43} \end{aligned}$$