

SOLUTIONS

Order of Operations (D) Answers

Name: _____

Date: _____

Solve each expression using the correct order of operations.

$$\begin{aligned} & \left(\left(\underline{(-4) + 4} \right) \times (-7)^2 \right) \div (-8) - 2^2 \\ & = \left(\underline{0} \times \underline{(-7)^2} \right) \div (-8) - 2^2 \\ & = \left(\underline{0} \times \underline{49} \right) \div (-8) - 2^2 \\ & = \underline{0} \div (-8) - \underline{2^2} \\ & = \underline{0} \div (-8) - 4 \\ & = \underline{0 - 4} \\ & = -4 \end{aligned}$$

$$\begin{aligned} & 2 \times \left(\left(\underline{(-8) - (-7)} \right)^2 \div (3 + (-2))^3 \right) \\ & = 2 \times \left(\underline{(-1)^2} \div \underline{(3 + (-2))^3} \right) \\ & = 2 \times \left(\underline{(-1)^2} \div \underline{1^3} \right) \\ & = 2 \times \left(\underline{1} \div \underline{1^3} \right) \\ & = 2 \times \left(\underline{1} \div \underline{1} \right) \\ & = \underline{2 \times 1} \\ & = 2 \end{aligned}$$

$$\begin{aligned} & \left(\underline{(-6)^2} \times \left(\underline{(-5) + 9 - 4} \right) \right)^2 \div 3 \\ & = \left(\underline{(-6)^2} \times \underline{(4 - 4)} \right)^2 \div 3 \\ & = \left(\underline{(-6)^2} \times \underline{0} \right)^2 \div 3 \\ & = \left(\underline{36} \times \underline{0} \right)^2 \div 3 \\ & = \underline{0^2} \div 3 \\ & = \underline{0} \div 3 \\ & = 0 \end{aligned}$$

$$\begin{aligned} & \left(\left(\underline{(-10) + 9} \right) \times (-2) \right)^3 \div (5 - 3) \times (-9) \\ & = \left(\underline{(-1) \times (-2)} \right)^3 \div (5 - 3) \times (-9) \\ & = \underline{2^3} \div \underline{(5 - 3)} \times (-9) \\ & = \underline{2^3} \div \underline{2} \times (-9) \\ & = \underline{8} \div \underline{2} \times (-9) \\ & = \underline{4} \times (-9) \\ & = -36 \end{aligned}$$

$$\begin{aligned} & \left(7 + \underline{(-3)^3} \right) \times \left(\left(\underline{(-10) - 10} \right) \div (-2)^2 \right) \\ & = \left(\underline{7 + (-27)} \right) \times \left(\left(\underline{(-10) - 10} \right) \div (-2)^2 \right) \\ & = \underline{(-20)} \times \left(\left(\underline{(-10) - 10} \right) \div (-2)^2 \right) \\ & = \underline{(-20)} \times \left(\underline{(-20)} \div \underline{(-2)^2} \right) \\ & = \underline{(-20)} \times \left(\underline{(-20)} \div \underline{4} \right) \\ & = \underline{(-20)} \times \underline{(-5)} \\ & = 100 \end{aligned}$$

$$\begin{aligned} & (-2)^2 - (-3) \times \left(\left(\underline{7 + (-7)} \right) \div \left(\underline{(-6) \times 3} \right) \right) \\ & = (-2)^2 - (-3) \times \left(\underline{0} \div \left(\underline{(-6) \times 3} \right) \right) \\ & = (-2)^2 - (-3) \times \left(\underline{0} \div \underline{(-18)} \right) \\ & = \underline{(-2)^2} - (-3) \times 0 \\ & = \underline{4} - \underline{(-3) \times 0} \\ & = \underline{4 - 0} \\ & = 4 \end{aligned}$$