

Order of Operations (D)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(((-4) + 4) \times (-7)^2) \div (-8) - 2^2$$

$$2 \times (((-8) - (-7))^2 \div (3 + (-2))^3)$$

$$((-6)^2 \times ((-5) + 9 - 4))^2 \div 3$$

$$(((-10) + 9) \times (-2))^3 \div (5 - 3) \times (-9)$$

$$(7 + (-3)^3) \times (((-10) - 10) \div (-2)^2)$$

$$(-2)^2 - (-3) \times ((7 + (-7)) \div ((-6) \times 3))$$

Order of Operations (D) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

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

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

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

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