

Order of Operations (I)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

$$((-2) \div 2) \times (3^2 + 8 - 10)^2$$

$$((-6) \div (-3))^3 \times ((-4) - 6 + (-8) - (-10))$$

$$(8 - 2^3)^2 \div ((-9) \times (3 + (-2)))$$

$$((-6) \div (-2))^2 \times (4 + 5 - 8) \times (-7)$$

$$(-2) + (-4)^3 \times (((-3) - 7) \div 10)^2$$

Order of Operations (I) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left((-5) \div (9 + (-10)) \right)^2 \times 3^2 - 2 \\ & = \left((-5) \div (-1)^2 \right) \times 3^2 - 2 \\ & = \left((-5) \div 1 \right) \times 3^2 - 2 \\ & = (-5) \times 3^2 - 2 \\ & = (-5) \times 9 - 2 \\ & = (-45) - 2 \\ & = -47 \end{aligned}$$

$$\begin{aligned} & \left((-2) \div 2 \right) \times (3^2 + 8 - 10)^2 \\ & = (-1) \times (3^2 + 8 - 10)^2 \\ & = (-1) \times (9 + 8 - 10)^2 \\ & = (-1) \times (17 - 10)^2 \\ & = (-1) \times 7^2 \\ & = (-1) \times 49 \\ & = -49 \end{aligned}$$

$$\begin{aligned} & \left((-6) \div (-3) \right)^3 \times ((-4) - 6 + (-8) - (-10)) \\ & = 2^3 \times ((-4) - 6 + (-8) - (-10)) \\ & = 2^3 \times ((-10) + (-8) - (-10)) \\ & = 2^3 \times ((-18) - (-10)) \\ & = 2^3 \times (-8) \\ & = 8 \times (-8) \\ & = -64 \end{aligned}$$

$$\begin{aligned} & (8 - 2^3)^2 \div ((-9) \times (3 + (-2))) \\ & = (8 - 8)^2 \div ((-9) \times (3 + (-2))) \\ & = 0^2 \div ((-9) \times (3 + (-2))) \\ & = 0^2 \div ((-9) \times 1) \\ & = 0^2 \div (-9) \\ & = 0 \div (-9) \\ & = 0 \end{aligned}$$

$$\begin{aligned} & \left((-6) \div (-2) \right)^2 \times (4 + 5 - 8) \times (-7) \\ & = 3^2 \times (4 + 5 - 8) \times (-7) \\ & = 3^2 \times (9 - 8) \times (-7) \\ & = 3^2 \times 1 \times (-7) \\ & = 9 \times 1 \times (-7) \\ & = 9 \times (-7) \\ & = -63 \end{aligned}$$

$$\begin{aligned} & (-2) + (-4)^3 \times \left(\left((-3) - 7 \right) \div 10 \right)^2 \\ & = (-2) + (-4)^3 \times \left((-10) \div 10 \right)^2 \\ & = (-2) + (-4)^3 \times (-1)^2 \\ & = (-2) + (-64) \times (-1)^2 \\ & = (-2) + (-64) \times 1 \\ & = (-2) + (-64) \\ & = -66 \end{aligned}$$