

Order of Operations (G)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

$$(8 \div ((-5) + (-3)))^2 \times (2 - (-4) - 4)$$

$$(6 \div (7 + (-10))) \times (2 - 4) \times 3^2$$

$$8 \div ((-2) - (-6)) \times (9 + (-9)) \times (-4)^2$$

$$((-8) + 8)^3 \times (-4) \div ((-9) - 9) \times (-3)$$

$$((6 - 10) \div 2) \times (-4) + 9 - 8^2$$

Order of Operations (G) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned}
 & (-5)^2 \times (\underline{3 - 4})^3 \div ((-3) + (-2)) \\
 &= (-5)^2 \times (-1)^3 \div (\underline{-3} + \underline{-2}) \\
 &= \underline{(-5)^2} \times (-1)^3 \div (-5) \\
 &= 25 \times \underline{(-1)^3} \div (-5) \\
 &= \underline{25 \times (-1)} \div (-5) \\
 &= \underline{(-25)} \div \underline{(-5)} \\
 &= \underline{5}
 \end{aligned}$$

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

$$\begin{aligned}
 & \left(6 \div (\underline{7} + \underline{-10}) \right) \times (2 - 4) \times 3^2 \\
 &= \left(\underline{6 \div (-3)} \right) \times (2 - 4) \times 3^2 \\
 &= (-2) \times (\underline{2} - \underline{4}) \times 3^2 \\
 &= (-2) \times (-2) \times \underline{3^2} \\
 &= \underline{(-2) \times (-2)} \times 9 \\
 &= \underline{4 \times 9} \\
 &= \underline{36}
 \end{aligned}$$

$$\begin{aligned}
 & 8 \div (\underline{-2} - \underline{-6}) \times (9 + (-9)) \times (-4)^2 \\
 &= 8 \div 4 \times (\underline{9} + \underline{-9}) \times (-4)^2 \\
 &= 8 \div 4 \times 0 \times \underline{(-4)^2} \\
 &= \underline{8 \div 4} \times 0 \times 16 \\
 &= \underline{2 \times 0} \times 16 \\
 &= \underline{0 \times 16} \\
 &= \underline{0}
 \end{aligned}$$

$$\begin{aligned}
 & (\underline{-8} + \underline{8})^3 \times (-4) \div ((-9) - 9) \times (-3) \\
 &= 0^3 \times (-4) \div (\underline{-9} - \underline{9}) \times (-3) \\
 &= \underline{0^3} \times (-4) \div (-18) \times (-3) \\
 &= \underline{0 \times (-4)} \div (-18) \times (-3) \\
 &= \underline{0 \div (-18)} \times (-3) \\
 &= \underline{0 \times (-3)} \\
 &= \underline{0}
 \end{aligned}$$

$$\begin{aligned}
 & ((\underline{6} - \underline{10}) \div 2) \times (-4) + 9 - 8^2 \\
 &= (\underline{-4} \div \underline{2}) \times (-4) + 9 - 8^2 \\
 &= (-2) \times (-4) + 9 - \underline{8^2} \\
 &= \underline{(-2) \times (-4)} + 9 - 64 \\
 &= \underline{8 + 9} - 64 \\
 &= \underline{17 - 64} \\
 &= \underline{-47}
 \end{aligned}$$