

Order of Operations (F)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$10^2 \div ((5 + (-6) - (-3)) \times ((-9) - (-8)))$$

$$(9 \div 3) \times ((-3) + (-6)^2 - (-7) - 7)$$

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

$$((-8) \times (-10)) \div (8 - (-2) + (-9) - 3^2)$$

$$(9 + (-8))^3 \times ((-6)^2 \div (4 - 5))$$

$$(-3) \times (7 - 2 + (-2)^2) \div ((-5) + 4)$$

Order of Operations (F) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & 10^2 \div \left(\left(\underline{5 + (-6)} - (-3) \right) \times \left((-9) - (-8) \right) \right) \\ & = 10^2 \div \left(\left(\underline{(-1) - (-3)} \right) \times \left((-9) - (-8) \right) \right) \\ & = 10^2 \div \left(2 \times \left(\underline{(-9) - (-8)} \right) \right) \\ & = 10^2 \div \left(\underline{2 \times (-1)} \right) \\ & = \underline{10^2} \div (-2) \\ & = \underline{100} \div (-2) \\ & = -50 \end{aligned}$$

$$\begin{aligned} & \left(\underline{9 \div 3} \right) \times \left((-3) + (-6)^2 - (-7) - 7 \right) \\ & = 3 \times \left((-3) + \underline{(-6)^2} - (-7) - 7 \right) \\ & = 3 \times \left(\underline{(-3) + 36} - (-7) - 7 \right) \\ & = 3 \times \left(\underline{33 - (-7)} - 7 \right) \\ & = 3 \times \left(\underline{40 - 7} \right) \\ & = \underline{3 \times 33} \\ & = 99 \end{aligned}$$

$$\begin{aligned} & \left(3 - \underline{(-10)^2} + (-3) \right) \times \left((-6) \div 6 \right)^2 \\ & = \left(\underline{3 - 100} + (-3) \right) \times \left((-6) \div 6 \right)^2 \\ & = \left(\underline{(-97) + (-3)} \right) \times \left((-6) \div 6 \right)^2 \\ & = (-100) \times \left(\underline{(-6) \div 6} \right)^2 \\ & = (-100) \times \underline{(-1)^2} \\ & = \underline{(-100) \times 1} \\ & = -100 \end{aligned}$$

$$\begin{aligned} & \left(\underline{(-8) \times (-10)} \right) \div \left(8 - (-2) + (-9) - 3^2 \right) \\ & = 80 \div \left(8 - (-2) + (-9) - \underline{3^2} \right) \\ & = 80 \div \left(\underline{8 - (-2)} + (-9) - 9 \right) \\ & = 80 \div \left(\underline{10 + (-9)} - 9 \right) \\ & = 80 \div \left(\underline{1 - 9} \right) \\ & = \underline{80 \div (-8)} \\ & = -10 \end{aligned}$$

$$\begin{aligned} & \left(\underline{9 + (-8)} \right)^3 \times \left((-6)^2 \div (4 - 5) \right) \\ & = 1^3 \times \left((-6)^2 \div \underline{4 - 5} \right) \\ & = 1^3 \times \left(\underline{(-6)^2} \div (-1) \right) \\ & = 1^3 \times \left(\underline{36 \div (-1)} \right) \\ & = \underline{1^3} \times (-36) \\ & = \underline{1 \times (-36)} \\ & = -36 \end{aligned}$$

$$\begin{aligned} & (-3) \times \left(7 - 2 + \underline{(-2)^2} \right) \div \left((-5) + 4 \right) \\ & = (-3) \times \left(\underline{7 - 2} + 4 \right) \div \left((-5) + 4 \right) \\ & = (-3) \times \left(\underline{5 + 4} \right) \div \left((-5) + 4 \right) \\ & = (-3) \times 9 \div \left(\underline{(-5) + 4} \right) \\ & = \underline{(-3) \times 9} \div (-1) \\ & = \underline{(-27) \div (-1)} \\ & = 27 \end{aligned}$$