

Order of Operations (J)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(2 \times (7 + 10 - 5)) \div (6^2 \div 9)$$

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

$$((7 - 5) \times 3^2) \div 2 + 4 + (-8)$$

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

$$(5 \div ((-6) + 7)^2) \times ((-2) - 3^2)$$

$$(8 \div ((-10) + 9)^3) \times ((-6) - (-8) + 7)$$

Order of Operations (J) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned}(2 \times (7 + 10 - 5)) \div (6^2 \div 9) \\ &= (2 \times (17 - 5)) \div (6^2 \div 9) \\ &= (2 \times 12) \div (6^2 \div 9) \\ &= 24 \div (6^2 \div 9) \\ &= 24 \div (36 \div 9) \\ &= 24 \div 4 \\ &= 6\end{aligned}$$

$$\begin{aligned}((2 + (-8)) \div (-3)) \times (3^2 - (-5) - (-2)) \\ &= ((-6) \div (-3)) \times (3^2 - (-5) - (-2)) \\ &= 2 \times (3^2 - (-5) - (-2)) \\ &= 2 \times (9 - (-5) - (-2)) \\ &= 2 \times (14 - (-2)) \\ &= 2 \times 16 \\ &= 32\end{aligned}$$

$$\begin{aligned}((7 - 5) \times 3^2) \div 2 + 4 + (-8) \\ &= (2 \times 3^2) \div 2 + 4 + (-8) \\ &= (2 \times 9) \div 2 + 4 + (-8) \\ &= 18 \div 2 + 4 + (-8) \\ &= 9 + 4 + (-8) \\ &= 13 + (-8) \\ &= 5\end{aligned}$$

$$\begin{aligned}(6^2 \div (-2)) \times (3 - 2^3 + 7) \\ &= (36 \div (-2)) \times (3 - 2^3 + 7) \\ &= (-18) \times (3 - 2^3 + 7) \\ &= (-18) \times (3 - 8 + 7) \\ &= (-18) \times ((-5) + 7) \\ &= (-18) \times 2 \\ &= -36\end{aligned}$$

$$\begin{aligned}(5 \div ((-6) + 7)^2) \times ((-2) - 3^2) \\ &= (5 \div 1^2) \times ((-2) - 3^2) \\ &= (5 \div 1) \times ((-2) - 3^2) \\ &= 5 \times ((-2) - 3^2) \\ &= 5 \times ((-2) - 9) \\ &= 5 \times (-11) \\ &= -55\end{aligned}$$

$$\begin{aligned}(8 \div ((-10) + 9)^3) \times ((-6) - (-8) + 7) \\ &= (8 \div (-1)^3) \times ((-6) - (-8) + 7) \\ &= (8 \div (-1)) \times ((-6) - (-8) + 7) \\ &= (-8) \times ((-6) - (-8) + 7) \\ &= (-8) \times (2 + 7) \\ &= (-8) \times 9 \\ &= -72\end{aligned}$$