

Order of Operations with Decimals (J)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(-7.4) \div (-3.7) \times ((5.2)^2 - (-2.9) + (-7.7)) \quad (-8.5) - (-0.6) \times ((-0.3) + (-1.2)^2 \div 3.6)$$

$$4.4 + 8.2 \times ((-2.6)^2 \div 1.3 - (-5.7))$$

$$(-8.4) \times ((-1.2) + 0.3) \div ((2.9)^2 - 8.2)$$

$$((-7.2) - 8.9 \times 5.9) \div (-3.5) + (-1.5)^2$$

$$(6.9 - (-4.6) \times (-0.4) + (3.8)^2) \div (-6.5)$$

Order of Operations with Decimals (J) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & (-7.4) \div (-3.7) \times \left(\underline{(5.2)^2} - (-2.9) + (-7.7) \right) \\ &= (-7.4) \div (-3.7) \times \left(\underline{27.04 - (-2.9)} + (-7.7) \right) \\ &= (-7.4) \div (-3.7) \times \left(\underline{29.94 + (-7.7)} \right) \\ &= \underline{(-7.4) \div (-3.7)} \times 22.24 \\ &= \underline{2 \times 22.24} \\ &= 44.48 \end{aligned}$$

$$\begin{aligned} & (-8.5) - (-0.6) \times \left((-0.3) + \underline{(-1.2)^2} \div 3.6 \right) \\ &= (-8.5) - (-0.6) \times \left((-0.3) + \underline{1.44 \div 3.6} \right) \\ &= (-8.5) - (-0.6) \times \left(\underline{(-0.3) + 0.4} \right) \\ &= (-8.5) - \underline{(-0.6) \times 0.1} \\ &= \underline{(-8.5) - (-0.06)} \\ &= -8.44 \end{aligned}$$

$$\begin{aligned} & 4.4 + 8.2 \times \left(\underline{(-2.6)^2} \div 1.3 - (-5.7) \right) \\ &= 4.4 + 8.2 \times \left(\underline{6.76 \div 1.3} - (-5.7) \right) \\ &= 4.4 + 8.2 \times \left(\underline{5.2 - (-5.7)} \right) \\ &= 4.4 + \underline{8.2 \times 10.9} \\ &= \underline{4.4 + 89.38} \\ &= 93.78 \end{aligned}$$

$$\begin{aligned} & (-8.4) \times \left(\underline{(-1.2) + 0.3} \right) \div \left((2.9)^2 - 8.2 \right) \\ &= (-8.4) \times (-0.9) \div \left(\underline{(2.9)^2} - 8.2 \right) \\ &= (-8.4) \times (-0.9) \div \left(\underline{8.41 - 8.2} \right) \\ &= \underline{(-8.4) \times (-0.9)} \div 0.21 \\ &= \underline{7.56 \div 0.21} \\ &= 36 \end{aligned}$$

$$\begin{aligned} & \left((-7.2) - \underline{8.9 \times 5.9} \right) \div (-3.5) + (-1.5)^2 \\ &= \left(\underline{(-7.2) - 52.51} \right) \div (-3.5) + (-1.5)^2 \\ &= (-59.71) \div (-3.5) + \underline{(-1.5)^2} \\ &= \underline{(-59.71) \div (-3.5)} + 2.25 \\ &= \underline{17.06 + 2.25} \\ &= 19.31 \end{aligned}$$

$$\begin{aligned} & \left(6.9 - (-4.6) \times (-0.4) + \underline{(3.8)^2} \right) \div (-6.5) \\ &= \left(6.9 - \underline{(-4.6) \times (-0.4)} + 14.44 \right) \div (-6.5) \\ &= \left(\underline{6.9 - 1.84} + 14.44 \right) \div (-6.5) \\ &= \left(\underline{5.06 + 14.44} \right) \div (-6.5) \\ &= \underline{19.5 \div (-6.5)} \\ &= -3 \end{aligned}$$