Order of Operations with Decimals (J)

Name:

Date:

Solve each expression using the correct order of operations.

 $\left(4.3 \div (-2.5) + 2.1\right) \times \left(1.5 - (-6.4) + (-4.9)\right)^2$

 $(-0.2)^2 \div ((9.3 + (-5.1) - 7.9) \times 1.4 + 5.1)$

$$\left(-0.5\right)^2 \times \left(\left((-4.3) + (-3.7)\right) \div (1.9 - 2.9)\right)^2$$

Order of Operations with Decimals (J) Answers

Name:

Date:

Solve each expression using the correct order of operations.

$$\begin{pmatrix} 4.3 \div (-2.5) + 2.1 \end{pmatrix} \times (1.5 - (-6.4) + (-4.9))^2 \\ = \left((-1.72) + 2.1 \right) \times (1.5 - (-6.4) + (-4.9))^2 \\ = 0.38 \times \left(1.5 - (-6.4) + (-4.9) \right)^2 \\ = 0.38 \times \left(1.5 - (-6.4) + (-4.9) \right)^2 \\ = 0.38 \times \frac{3^2}{2} \\ = 0.38 \times \frac{3^2}{2} \\ = 0.38 \times 9 \\ = 3.42 \\ (-0.2)^2 \div \left(\left(\frac{9.3 + (-5.1)}{2} - 7.9 \right) \times 1.4 + 5.1 \right) \\ = (-0.2)^2 \div \left((4.2 - 7.9) \times 1.4 + 5.1 \right) \\ = (-0.2)^2 \div \left((-3.7) \times 1.4 + 5.1 \right) \\ = (-0.2)^2 \div \left((-5.18) + 5.1 \right) \\ = \left(-0.2 \right)^2 \div \left((-0.08) \\ = -0.5 \\ \end{pmatrix}$$

$$(-0.5)^{2} \times \left(\left((-4.3) + (-3.7) \right) \div (1.9 - 2.9) \right)^{2}$$

= $(-0.5)^{2} \times ((-8) \div (1.9 - 2.9))^{2}$
= $(-0.5)^{2} \times \left((-8) \div (-1) \right)^{2}$
= $(-0.5)^{2} \times 8^{2}$
= 0.25×8^{2}
= 0.25×64
= 16