

Order of Operations with Decimals (E)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$((-4.5)^2 + (-7.8) - 8.4) \times (-5.2)$$

$$((-0.1) + (-8.3)) \div (-2.5) - (1.4)^2$$

$$(2.5)^2 \times ((-4.6) - 7.6 + (-0.8))$$

$$((-3.8) - (-8.3) + (-3.5)) \times (-4.6)^2$$

$$(6.4 + (-3.9) - 2.5)^2 \times (-2.8)$$

$$(4.3)^2 + (-4.8) \times (4.4 - 5.2)$$

$$(-8.2) \times ((-3.4) - (-1.9) + 2.5)^2$$

$$(0.5 \times 9.4)^2 \div 4.7 - 5.4$$

Order of Operations with Decimals (E) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\underline{(-4.5)^2} + (-7.8) - 8.4 \right) \times (-5.2) \\ & = \left(\underline{20.25} + \underline{(-7.8)} - 8.4 \right) \times (-5.2) \\ & = \left(\underline{12.45} - 8.4 \right) \times (-5.2) \\ & = \underline{4.05} \times \underline{(-5.2)} \\ & = \underline{-21.06} \end{aligned}$$

$$\begin{aligned} & \left(\underline{(-0.1) + (-8.3)} \right) \div (-2.5) - (1.4)^2 \\ & = (-8.4) \div (-2.5) - \underline{(1.4)^2} \\ & = \underline{(-8.4) \div (-2.5)} - 1.96 \\ & = \underline{3.36} - 1.96 \\ & = \underline{1.4} \end{aligned}$$

$$\begin{aligned} & (2.5)^2 \times \left(\underline{(-4.6) - 7.6} + (-0.8) \right) \\ & = (2.5)^2 \times \left(\underline{(-12.2) + (-0.8)} \right) \\ & = \underline{(2.5)^2} \times (-13) \\ & = \underline{6.25} \times \underline{(-13)} \\ & = \underline{-81.25} \end{aligned}$$

$$\begin{aligned} & \left(\underline{(-3.8) - (-8.3)} + (-3.5) \right) \times (-4.6)^2 \\ & = \left(\underline{4.5} + \underline{(-3.5)} \right) \times (-4.6)^2 \\ & = 1 \times \underline{(-4.6)^2} \\ & = \underline{1} \times \underline{21.16} \\ & = \underline{21.16} \end{aligned}$$

$$\begin{aligned} & \left(\underline{6.4 + (-3.9)} - 2.5 \right)^2 \times (-2.8) \\ & = \left(\underline{2.5} - 2.5 \right)^2 \times (-2.8) \\ & = \underline{0^2} \times (-2.8) \\ & = \underline{0} \times \underline{(-2.8)} \\ & = \underline{0} \end{aligned}$$

$$\begin{aligned} & (4.3)^2 + (-4.8) \times \underline{(4.4 - 5.2)} \\ & = \underline{(4.3)^2} + (-4.8) \times (-0.8) \\ & = 18.49 + \underline{(-4.8) \times (-0.8)} \\ & = \underline{18.49 + 3.84} \\ & = \underline{22.33} \end{aligned}$$

$$\begin{aligned} & (-8.2) \times \left(\underline{(-3.4) - (-1.9)} + 2.5 \right)^2 \\ & = (-8.2) \times \left(\underline{(-1.5) + 2.5} \right)^2 \\ & = (-8.2) \times \underline{1^2} \\ & = \underline{(-8.2) \times 1} \\ & = \underline{-8.2} \end{aligned}$$

$$\begin{aligned} & \left(\underline{0.5 \times 9.4} \right)^2 \div 4.7 - 5.4 \\ & = \underline{(4.7)^2} \div 4.7 - 5.4 \\ & = \underline{22.09} \div 4.7 - 5.4 \\ & = \underline{4.7 - 5.4} \\ & = \underline{-0.7} \end{aligned}$$