

Order of Operations with Decimals (I)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$((1.8)^2 \div (-1.8)) \times ((-5.3) - 0.7 + (-7.7))$$

$$(1.6 \div (-0.4)^2 - (-0.7) + (-5.5)) \times (-9.5)$$

$$((-1.8) + (1.8)^2 - (-3.8) \times (-9.6)) \div 0.5$$

$$(((-9.2) + 9.2) \times 0.9)^2 \div 1.1 - (-0.3)$$

$$(8.5)^2 - 4.9 \times ((-6.3) \div (-2.1) + 0.5)$$

$$4.6 + (4.5)^2 \div (5.3 - 8.3) \times (-4.6)$$

Order of Operations with Decimals (I) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\underline{(1.8)^2} \div (-1.8) \right) \times ((-5.3) - 0.7 + (-7.7)) \\ & = \left(\underline{3.24 \div (-1.8)} \right) \times ((-5.3) - 0.7 + (-7.7)) \\ & = (-1.8) \times \left(\underline{(-5.3) - 0.7} + (-7.7) \right) \\ & = (-1.8) \times \left(\underline{(-6) + (-7.7)} \right) \\ & = \underline{(-1.8) \times (-13.7)} \\ & = 24.66 \end{aligned}$$

$$\begin{aligned} & \left(1.6 \div \underline{(-0.4)^2} - (-0.7) + (-5.5) \right) \times (-9.5) \\ & = \left(\underline{1.6 \div 0.16} - (-0.7) + (-5.5) \right) \times (-9.5) \\ & = \left(\underline{10 - (-0.7)} + (-5.5) \right) \times (-9.5) \\ & = \left(\underline{10.7 + (-5.5)} \right) \times (-9.5) \\ & = \underline{5.2 \times (-9.5)} \\ & = -49.4 \end{aligned}$$

$$\begin{aligned} & \left((-1.8) + \underline{(1.8)^2} - (-3.8) \times (-9.6) \right) \div 0.5 \\ & = \left((-1.8) + 3.24 - \underline{(-3.8) \times (-9.6)} \right) \div 0.5 \\ & = \left(\underline{(-1.8) + 3.24} - 36.48 \right) \div 0.5 \\ & = \underline{(1.44 - 36.48)} \div 0.5 \\ & = \underline{(-35.04) \div 0.5} \\ & = -70.08 \end{aligned}$$

$$\begin{aligned} & \left(\left(\underline{(-9.2) + 9.2} \right) \times 0.9 \right)^2 \div 1.1 - (-0.3) \\ & = \left(\underline{0 \times 0.9} \right)^2 \div 1.1 - (-0.3) \\ & = \underline{0^2} \div 1.1 - (-0.3) \\ & = \underline{0 \div 1.1} - (-0.3) \\ & = \underline{0 - (-0.3)} \\ & = 0.3 \end{aligned}$$

$$\begin{aligned} & (8.5)^2 - 4.9 \times \left(\underline{(-6.3) \div (-2.1)} + 0.5 \right) \\ & = (8.5)^2 - 4.9 \times \left(\underline{3 + 0.5} \right) \\ & = \underline{(8.5)^2} - 4.9 \times 3.5 \\ & = 72.25 - \underline{4.9 \times 3.5} \\ & = \underline{72.25 - 17.15} \\ & = 55.1 \end{aligned}$$

$$\begin{aligned} & 4.6 + (4.5)^2 \div \left(\underline{5.3 - 8.3} \right) \times (-4.6) \\ & = 4.6 + \underline{(4.5)^2} \div (-3) \times (-4.6) \\ & = 4.6 + \underline{20.25 \div (-3)} \times (-4.6) \\ & = 4.6 + \underline{(-6.75) \times (-4.6)} \\ & = \underline{4.6 + 31.05} \\ & = 35.65 \end{aligned}$$