

Order of Operations with Decimals (F)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$((8.3)^2 \div (-8.3) - 8.5) \times ((-5.8) + 2.6)$$

$$(9.8 - 5.7 \times 4.6 + (8.2)^2) \div (-5.5)$$

$$(2.4 \times (-6.9)) \div (-1.6) + (-5.6) - (-3.3)^2$$

$$(2.1 \times (-4.1) + (-0.2) - 8.3) \div (0.5)^2$$

$$(-0.3)^2 + 2.4 \times (3.8 - 1.25) \div (-5.1)$$

$$((6.8)^2 \div 3.4) \times (0.5 + 3.3 - 5.1)$$

Order of Operations with Decimals (F) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\underline{(8.3)^2} \div (-8.3) - 8.5 \right) \times ((-5.8) + 2.6) \\ & = \left(\underline{68.89 \div (-8.3)} - 8.5 \right) \times ((-5.8) + 2.6) \\ & = \left(\underline{(-8.3) - 8.5} \right) \times ((-5.8) + 2.6) \\ & = (-16.8) \times \left(\underline{(-5.8) + 2.6} \right) \\ & = \underline{(-16.8) \times (-3.2)} \\ & = 53.76 \end{aligned}$$

$$\begin{aligned} & (9.8 - 5.7 \times 4.6 + \underline{(8.2)^2}) \div (-5.5) \\ & = (9.8 - \underline{5.7 \times 4.6} + 67.24) \div (-5.5) \\ & = \left(\underline{9.8 - 26.22} + 67.24 \right) \div (-5.5) \\ & = \left(\underline{(-16.42) + 67.24} \right) \div (-5.5) \\ & = \underline{50.82 \div (-5.5)} \\ & = -9.24 \end{aligned}$$

$$\begin{aligned} & \left(\underline{2.4 \times (-6.9)} \right) \div (-1.6) + (-5.6) - (-3.3)^2 \\ & = (-16.56) \div (-1.6) + (-5.6) - \underline{(-3.3)^2} \\ & = \underline{(-16.56) \div (-1.6)} + (-5.6) - 10.89 \\ & = \underline{10.35 + (-5.6)} - 10.89 \\ & = \underline{4.75 - 10.89} \\ & = -6.14 \end{aligned}$$

$$\begin{aligned} & \left(\underline{2.1 \times (-4.1)} + (-0.2) - 8.3 \right) \div (0.5)^2 \\ & = \left(\underline{(-8.61) + (-0.2)} - 8.3 \right) \div (0.5)^2 \\ & = \left(\underline{(-8.81) - 8.3} \right) \div (0.5)^2 \\ & = (-17.11) \div \underline{(0.5)^2} \\ & = \underline{(-17.11) \div 0.25} \\ & = -68.44 \end{aligned}$$

$$\begin{aligned} & (-0.3)^2 + 2.4 \times \left(\underline{3.8 - 1.25} \right) \div (-5.1) \\ & = \underline{(-0.3)^2} + 2.4 \times 2.55 \div (-5.1) \\ & = 0.09 + \underline{2.4 \times 2.55} \div (-5.1) \\ & = 0.09 + \underline{6.12 \div (-5.1)} \\ & = \underline{0.09 + (-1.2)} \\ & = -1.11 \end{aligned}$$

$$\begin{aligned} & \left(\underline{(6.8)^2} \div 3.4 \right) \times (0.5 + 3.3 - 5.1) \\ & = \left(\underline{46.24 \div 3.4} \right) \times (0.5 + 3.3 - 5.1) \\ & = 13.6 \times \left(\underline{0.5 + 3.3} - 5.1 \right) \\ & = 13.6 \times \left(\underline{3.8 - 5.1} \right) \\ & = \underline{13.6 \times (-1.3)} \\ & = -17.68 \end{aligned}$$