

Order of Operations with Decimals (J)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$1.8 \times ((1.5)^2 + 5.8 - 2.2)$$

$$1.3 - 7.2 \div (3.8 + (1.4)^2)$$

$$(4.5 + 8.2 - 9.8)^2 \div 2.9$$

$$(5.3 + 4.6 - 3.3)^2 \div 1.2$$

$$(1.8)^2 \times (7.1 + 6.2 - 5.3)$$

$$8.2 \times ((2.5)^2 - 2.6 + 4.9)$$

$$6.5 \div (4.7 + 1.8) \times (8.7)^2$$

$$(2.5)^2 \times (4.5 + 2.9 - 6.4)$$

Order of Operations with Decimals (J) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & 1.8 \times ((\underline{1.5})^2 + 5.8 - 2.2) \\ &= 1.8 \times (\underline{2.25} + \underline{5.8} - 2.2) \\ &= 1.8 \times (\underline{8.05} - \underline{2.2}) \\ &= \underline{1.8} \times \underline{5.85} \\ &= \underline{10.53} \end{aligned}$$

$$\begin{aligned} & 1.3 - 7.2 \div (3.8 + (\underline{1.4})^2) \\ &= 1.3 - 7.2 \div (\underline{3.8} + \underline{1.96}) \\ &= 1.3 - \underline{7.2} \div \underline{5.76} \\ &= \underline{1.3} - \underline{1.25} \\ &= \underline{0.05} \end{aligned}$$

$$\begin{aligned} & (\underline{4.5} + \underline{8.2} - 9.8)^2 \div 2.9 \\ &= (\underline{12.7} - \underline{9.8})^2 \div 2.9 \\ &= (\underline{2.9})^2 \div 2.9 \\ &= \underline{8.41} \div \underline{2.9} \\ &= \underline{2.9} \end{aligned}$$

$$\begin{aligned} & (\underline{5.3} + \underline{4.6} - 3.3)^2 \div 1.2 \\ &= (\underline{9.9} - \underline{3.3})^2 \div 1.2 \\ &= (\underline{6.6})^2 \div 1.2 \\ &= \underline{43.56} \div \underline{1.2} \\ &= \underline{36.3} \end{aligned}$$

$$\begin{aligned} & (1.8)^2 \times (\underline{7.1} + \underline{6.2} - 5.3) \\ &= (1.8)^2 \times (\underline{13.3} - \underline{5.3}) \\ &= (\underline{1.8})^2 \times 8 \\ &= \underline{3.24} \times \underline{8} \\ &= \underline{25.92} \end{aligned}$$

$$\begin{aligned} & 8.2 \times ((\underline{2.5})^2 - 2.6 + 4.9) \\ &= 8.2 \times (\underline{6.25} - \underline{2.6} + \underline{4.9}) \\ &= 8.2 \times (\underline{3.65} + \underline{4.9}) \\ &= \underline{8.2} \times \underline{8.55} \\ &= \underline{70.11} \end{aligned}$$

$$\begin{aligned} & 6.5 \div (\underline{4.7} + \underline{1.8}) \times (8.7)^2 \\ &= 6.5 \div 6.5 \times (\underline{8.7})^2 \\ &= \underline{6.5} \div \underline{6.5} \times 75.69 \\ &= \underline{1} \times \underline{75.69} \\ &= \underline{75.69} \end{aligned}$$

$$\begin{aligned} & (2.5)^2 \times (\underline{4.5} + \underline{2.9} - 6.4) \\ &= (2.5)^2 \times (\underline{7.4} - \underline{6.4}) \\ &= (\underline{2.5})^2 \times 1 \\ &= \underline{6.25} \times \underline{1} \\ &= \underline{6.25} \end{aligned}$$