

Order of Operations with Decimals (A)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$7.2 \div (6.6 \times 1.1 + (2.2)^2 - 3.1)$$

$$(2.8 \div 1.25) \times (3.9 - 1.2 + 2.8)^2$$

$$(3.2 \times 3.4) \div 1.7 - 1.2 + (8.7)^2$$

$$((3.6)^2 - 8.4 \div 2.8) \times (1.8 + 8.2)$$

$$(7.8 + 3.2) \times (2.1)^2 \div 1.4 - 9.8$$

$$4.6 + 2.4 \times 7.2 \div (2.2 - 1.6)^2$$

$$(3.8 + 7.5 - 9.9)^2 \div 4.9 \times 8.8$$

$$(4.5 - 1.6 \div 1.6) \times 2.8 + (6.5)^2$$

Order of Operations with Decimals (A) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} &7.2 \div (6.6 \times 1.1 + \underline{(2.2)^2} - 3.1) \\ &= 7.2 \div (\underline{6.6 \times 1.1} + 4.84 - 3.1) \\ &= 7.2 \div (\underline{7.26 + 4.84} - 3.1) \\ &= 7.2 \div (\underline{12.1 - 3.1}) \\ &= \underline{7.2 \div 9} \\ &= 0.8 \end{aligned}$$

$$\begin{aligned} &(\underline{3.2 \times 3.4}) \div 1.7 - 1.2 + (8.7)^2 \\ &= 10.88 \div 1.7 - 1.2 + \underline{(8.7)^2} \\ &= \underline{10.88 \div 1.7} - 1.2 + 75.69 \\ &= \underline{6.4 - 1.2} + 75.69 \\ &= \underline{5.2 + 75.69} \\ &= 80.89 \end{aligned}$$

$$\begin{aligned} &(\underline{7.8 + 3.2}) \times (2.1)^2 \div 1.4 - 9.8 \\ &= 11 \times \underline{(2.1)^2} \div 1.4 - 9.8 \\ &= \underline{11 \times 4.41} \div 1.4 - 9.8 \\ &= \underline{48.51 \div 1.4} - 9.8 \\ &= \underline{34.65 - 9.8} \\ &= 24.85 \end{aligned}$$

$$\begin{aligned} &(\underline{3.8 + 7.5} - 9.9)^2 \div 4.9 \times 8.8 \\ &= (\underline{11.3 - 9.9})^2 \div 4.9 \times 8.8 \\ &= \underline{(1.4)^2} \div 4.9 \times 8.8 \\ &= \underline{1.96 \div 4.9} \times 8.8 \\ &= \underline{0.4 \times 8.8} \\ &= 3.52 \end{aligned}$$

$$\begin{aligned} &(\underline{2.8 \div 1.25}) \times (3.9 - 1.2 + 2.8)^2 \\ &= 2.24 \times (\underline{3.9 - 1.2} + 2.8)^2 \\ &= 2.24 \times (\underline{2.7 + 2.8})^2 \\ &= 2.24 \times \underline{(5.5)^2} \\ &= \underline{2.24 \times 30.25} \\ &= 67.76 \end{aligned}$$

$$\begin{aligned} &(\underline{(3.6)^2} - 8.4 \div 2.8) \times (1.8 + 8.2) \\ &= (12.96 - \underline{8.4 \div 2.8}) \times (1.8 + 8.2) \\ &= (\underline{12.96 - 3}) \times (1.8 + 8.2) \\ &= 9.96 \times (\underline{1.8 + 8.2}) \\ &= \underline{9.96 \times 10} \\ &= 99.6 \end{aligned}$$

$$\begin{aligned} &4.6 + 2.4 \times 7.2 \div (\underline{2.2 - 1.6})^2 \\ &= 4.6 + 2.4 \times 7.2 \div \underline{(0.6)^2} \\ &= 4.6 + \underline{2.4 \times 7.2} \div 0.36 \\ &= 4.6 + \underline{17.28 \div 0.36} \\ &= \underline{4.6 + 48} \\ &= 52.6 \end{aligned}$$

$$\begin{aligned} &(4.5 - \underline{1.6 \div 1.6}) \times 2.8 + (6.5)^2 \\ &= (\underline{4.5 - 1}) \times 2.8 + (6.5)^2 \\ &= 3.5 \times 2.8 + \underline{(6.5)^2} \\ &= \underline{3.5 \times 2.8} + 42.25 \\ &= \underline{9.8 + 42.25} \\ &= 52.05 \end{aligned}$$