

Order of Operations with Decimals (E)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$3.2 \times (4.8 + 2.2 - 6.6 \div 1.1)^2$$

$$((7.9)^2 + 4.5 - 5.5) \div 8.9 \times 1.4$$

$$(3.3 + (2.6)^2 - 6.6 \div 3.75) \times 1.5$$

$$((7.5 + 2.8 - 9.7)^2 \times 6.5) \div 5.2$$

$$((5.1)^2 + 4.3 \times 3.7 - 9.3) \div 1.4$$

$$(3.6 + 3.3 - 2.5)^2 \div 3.2 \times 2.4$$

$$4.8 \div (9.5 - 7.5) \times 5.3 + (3.6)^2$$

$$((2.8)^2 \div 2.8 + 4.7) \times 9.6 - 4.8$$

Order of Operations with Decimals (E) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & 3.2 \times (4.8 + 2.2 - \underline{6.6 \div 1.1})^2 \\ &= 3.2 \times (\underline{4.8 + 2.2} - 6)^2 \\ &= 3.2 \times (\underline{7 - 6})^2 \\ &= 3.2 \times \underline{1^2} \\ &= \underline{3.2 \times 1} \\ &= \underline{3.2} \end{aligned}$$

$$\begin{aligned} & (3.3 + \underline{(2.6)^2} - 6.6 \div 3.75) \times 1.5 \\ &= (3.3 + 6.76 - \underline{6.6 \div 3.75}) \times 1.5 \\ &= (\underline{3.3 + 6.76} - 1.76) \times 1.5 \\ &= (\underline{10.06 - 1.76}) \times 1.5 \\ &= \underline{8.3 \times 1.5} \\ &= \underline{12.45} \end{aligned}$$

$$\begin{aligned} & (\underline{(5.1)^2} + 4.3 \times 3.7 - 9.3) \div 1.4 \\ &= (26.01 + \underline{4.3 \times 3.7} - 9.3) \div 1.4 \\ &= (\underline{26.01 + 15.91} - 9.3) \div 1.4 \\ &= (\underline{41.92 - 9.3}) \div 1.4 \\ &= \underline{32.62 \div 1.4} \\ &= \underline{23.3} \end{aligned}$$

$$\begin{aligned} & 4.8 \div (\underline{9.5 - 7.5}) \times 5.3 + (3.6)^2 \\ &= 4.8 \div 2 \times 5.3 + \underline{(3.6)^2} \\ &= \underline{4.8 \div 2} \times 5.3 + 12.96 \\ &= \underline{2.4 \times 5.3} + 12.96 \\ &= \underline{12.72 + 12.96} \\ &= \underline{25.68} \end{aligned}$$

$$\begin{aligned} & (\underline{(7.9)^2} + 4.5 - 5.5) \div 8.9 \times 1.4 \\ &= (\underline{62.41 + 4.5} - 5.5) \div 8.9 \times 1.4 \\ &= (\underline{66.91 - 5.5}) \div 8.9 \times 1.4 \\ &= \underline{61.41 \div 8.9} \times 1.4 \\ &= \underline{6.9 \times 1.4} \\ &= \underline{9.66} \end{aligned}$$

$$\begin{aligned} & ((\underline{7.5 + 2.8} - 9.7)^2 \times 6.5) \div 5.2 \\ &= ((\underline{10.3 - 9.7})^2 \times 6.5) \div 5.2 \\ &= (\underline{(0.6)^2} \times 6.5) \div 5.2 \\ &= (\underline{0.36 \times 6.5}) \div 5.2 \\ &= \underline{2.34 \div 5.2} \\ &= \underline{0.45} \end{aligned}$$

$$\begin{aligned} & (\underline{3.6 + 3.3} - 2.5)^2 \div 3.2 \times 2.4 \\ &= (\underline{6.9 - 2.5})^2 \div 3.2 \times 2.4 \\ &= \underline{(4.4)^2} \div 3.2 \times 2.4 \\ &= \underline{19.36 \div 3.2} \times 2.4 \\ &= \underline{6.05 \times 2.4} \\ &= \underline{14.52} \end{aligned}$$

$$\begin{aligned} & (\underline{(2.8)^2} \div 2.8 + 4.7) \times 9.6 - 4.8 \\ &= (\underline{7.84 \div 2.8} + 4.7) \times 9.6 - 4.8 \\ &= (\underline{2.8 + 4.7}) \times 9.6 - 4.8 \\ &= \underline{7.5 \times 9.6} - 4.8 \\ &= \underline{72 - 4.8} \\ &= \underline{67.2} \end{aligned}$$