

Order of Operations with Decimals (E)

Name: _____

Date: _____

Solve each expression using the correct order of operations.

$$(2.6 \times 6.9) \div 0.25 + (3.7)^2 - (1.7)^2$$

$$0.25 \times \left((3.8 + 2.4)^2 \div (4.6 - 1.5)^2 \right)$$

$$((8.2 - 1.2) \times 9.4) \div 2.5 + (2.8)^2 - 3.9$$

$$((4.5 + 2.1) \div 3.75) \times (3.7 - 1.4 + 5.2)^2$$

$$(9.2)^2 - (2.5)^2 \times (6.2 + 5.2) \div 7.5$$

$$\left((1.6)^2 \times (8.7 + 9.3) \right) \div 1.8 - 3.7 - 1.9$$

Order of Operations with Decimals (E) Answers

Name: _____

Date: _____

Solve each expression using the correct order of operations.

$$\begin{aligned} & (\underline{2.6 \times 6.9}) \div 0.25 + (3.7)^2 - (1.7)^2 \\ &= 17.94 \div 0.25 + \underline{(3.7)^2} - (1.7)^2 \\ &= 17.94 \div 0.25 + 13.69 - \underline{(1.7)^2} \\ &= \underline{17.94 \div 0.25} + 13.69 - 2.89 \\ &= \underline{71.76 + 13.69} - 2.89 \\ &= \underline{85.45} - 2.89 \\ &= 82.56 \end{aligned}$$

$$\begin{aligned} & 0.25 \times ((\underline{3.8 + 2.4})^2 \div (4.6 - 1.5)^2) \\ &= 0.25 \times ((6.2)^2 \div (\underline{4.6 - 1.5})^2) \\ &= 0.25 \times ((\underline{6.2})^2 \div (3.1)^2) \\ &= 0.25 \times (38.44 \div (\underline{3.1})^2) \\ &= 0.25 \times (\underline{38.44 \div 9.61}) \\ &= \underline{0.25 \times 4} \\ &= 1 \end{aligned}$$

$$\begin{aligned} & ((\underline{8.2 - 1.2}) \times 9.4) \div 2.5 + (2.8)^2 - 3.9 \\ &= (\underline{7 \times 9.4}) \div 2.5 + (2.8)^2 - 3.9 \\ &= 65.8 \div 2.5 + \underline{(2.8)^2} - 3.9 \\ &= \underline{65.8 \div 2.5} + 7.84 - 3.9 \\ &= \underline{26.32 + 7.84} - 3.9 \\ &= \underline{34.16} - 3.9 \\ &= 30.26 \end{aligned}$$

$$\begin{aligned} & ((\underline{4.5 + 2.1}) \div 3.75) \times (3.7 - 1.4 + 5.2)^2 \\ &= (\underline{6.6 \div 3.75}) \times (3.7 - 1.4 + 5.2)^2 \\ &= 1.76 \times (\underline{3.7 - 1.4} + 5.2)^2 \\ &= 1.76 \times (\underline{2.3 + 5.2})^2 \\ &= 1.76 \times (\underline{7.5})^2 \\ &= \underline{1.76 \times 56.25} \\ &= 99 \end{aligned}$$

$$\begin{aligned} & (9.2)^2 - (2.5)^2 \times (\underline{6.2 + 5.2}) \div 7.5 \\ &= (\underline{9.2})^2 - (2.5)^2 \times 11.4 \div 7.5 \\ &= 84.64 - \underline{(2.5)^2} \times 11.4 \div 7.5 \\ &= 84.64 - \underline{6.25 \times 11.4} \div 7.5 \\ &= 84.64 - \underline{71.25 \div 7.5} \\ &= \underline{84.64} - 9.5 \\ &= 75.14 \end{aligned}$$

$$\begin{aligned} & ((1.6)^2 \times (\underline{8.7 + 9.3})) \div 1.8 - 3.7 - 1.9 \\ &= ((\underline{1.6})^2 \times 18) \div 1.8 - 3.7 - 1.9 \\ &= (\underline{2.56 \times 18}) \div 1.8 - 3.7 - 1.9 \\ &= \underline{46.08 \div 1.8} - 3.7 - 1.9 \\ &= \underline{25.6} - 3.7 - 1.9 \\ &= \underline{21.9} - 1.9 \\ &= 20 \end{aligned}$$