

Order of Operations with Decimals (I)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(3.6 \times 3.7 + (3.2)^2 - 4.8) \div 1.4$$

$$3.75 \times ((2.2 + 3.2)^2 \div 8.1 - 1.4)$$

$$((2.2 + 8.9) \div 7.4)^2 \times 5.4 - 6.4$$

$$(6.6 \div 2.2) \times 3.9 + (3.1)^2 - 7.5$$

$$((5.8)^2 \div (1.2 + 8.3 - 6.6)) \times 2.3$$

$$9.8 \times (1.9 \div (2.5 + 5.7 - 4.4))^2$$

$$((8.5)^2 + 2.8 \times 2.3) \div (6.7 - 3.7)$$

$$(4.1 + 2.7 - 6.8) \div (1.4)^2 \times 7.9$$

Order of Operations with Decimals (I) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & (3.6 \times 3.7 + \underline{(3.2)^2} - 4.8) \div 1.4 \\ & = (\underline{3.6 \times 3.7} + 10.24 - 4.8) \div 1.4 \\ & = (\underline{13.32} + \underline{10.24} - 4.8) \div 1.4 \\ & = (\underline{23.56} - 4.8) \div 1.4 \\ & = \underline{18.76} \div 1.4 \\ & = 13.4 \end{aligned}$$

$$\begin{aligned} & ((\underline{2.2} + \underline{8.9}) \div 7.4)^2 \times 5.4 - 6.4 \\ & = (\underline{11.1} \div 7.4)^2 \times 5.4 - 6.4 \\ & = \underline{(1.5)^2} \times 5.4 - 6.4 \\ & = \underline{2.25} \times 5.4 - 6.4 \\ & = \underline{12.15} - 6.4 \\ & = 5.75 \end{aligned}$$

$$\begin{aligned} & ((5.8)^2 \div (\underline{1.2} + \underline{8.3} - 6.6)) \times 2.3 \\ & = ((5.8)^2 \div (\underline{9.5} - \underline{6.6})) \times 2.3 \\ & = (\underline{(5.8)^2} \div 2.9) \times 2.3 \\ & = (\underline{33.64} \div 2.9) \times 2.3 \\ & = \underline{11.6} \times 2.3 \\ & = 26.68 \end{aligned}$$

$$\begin{aligned} & (\underline{(8.5)^2} + 2.8 \times 2.3) \div (6.7 - 3.7) \\ & = (72.25 + \underline{2.8 \times 2.3}) \div (6.7 - 3.7) \\ & = (\underline{72.25} + \underline{6.44}) \div (6.7 - 3.7) \\ & = 78.69 \div (\underline{6.7} - \underline{3.7}) \\ & = \underline{78.69} \div 3 \\ & = 26.23 \end{aligned}$$

$$\begin{aligned} & 3.75 \times ((\underline{2.2} + \underline{3.2})^2 \div 8.1 - 1.4) \\ & = 3.75 \times (\underline{(5.4)^2} \div 8.1 - 1.4) \\ & = 3.75 \times (\underline{29.16} \div \underline{8.1} - 1.4) \\ & = 3.75 \times (\underline{3.6} - 1.4) \\ & = \underline{3.75} \times \underline{2.2} \\ & = 8.25 \end{aligned}$$

$$\begin{aligned} & (\underline{6.6} \div \underline{2.2}) \times 3.9 + (3.1)^2 - 7.5 \\ & = 3 \times 3.9 + \underline{(3.1)^2} - 7.5 \\ & = \underline{3 \times 3.9} + 9.61 - 7.5 \\ & = \underline{11.7} + \underline{9.61} - 7.5 \\ & = \underline{21.31} - 7.5 \\ & = 13.81 \end{aligned}$$

$$\begin{aligned} & 9.8 \times (1.9 \div (\underline{2.5} + \underline{5.7} - 4.4))^2 \\ & = 9.8 \times (1.9 \div (\underline{8.2} - \underline{4.4}))^2 \\ & = 9.8 \times (\underline{1.9} \div \underline{3.8})^2 \\ & = 9.8 \times \underline{(0.5)^2} \\ & = \underline{9.8} \times \underline{0.25} \\ & = 2.45 \end{aligned}$$

$$\begin{aligned} & (\underline{4.1} + \underline{2.7} - 6.8) \div (1.4)^2 \times 7.9 \\ & = (\underline{6.8} - 6.8) \div (1.4)^2 \times 7.9 \\ & = 0 \div \underline{(1.4)^2} \times 7.9 \\ & = \underline{0} \div \underline{1.96} \times 7.9 \\ & = \underline{0} \times 7.9 \\ & = 0 \end{aligned}$$