

Order of Operations with Decimals (I)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(4.2 \div 0.2) \times (0.5)^2 - 0.8 + (7.1)^2$$

$$(5.4 \times 5.7) \div 9.5 + (3.6)^2 - 4.3 + 9.1$$

$$5.7 \times (9.2 + (6.7)^2 - (7.3)^2) \div 0.2$$

$$(8.7 + 3.4 - 1.1) \times ((1.2)^2 \div (5.5 - 1.5))$$

$$(1.8 + 2.4)^2 \times (9.2 - 7.2)^2 \div 1.2$$

$$(8.7 \div (5.3 - 0.5 + 3.9))^2 \times (9.2)^2$$

Order of Operations with Decimals (I) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & (\underline{4.2 \div 0.2}) \times (0.5)^2 - 0.8 + (7.1)^2 \\ &= 21 \times \underline{(0.5)^2} - 0.8 + (7.1)^2 \\ &= 21 \times 0.25 - 0.8 + \underline{(7.1)^2} \\ &= \underline{21 \times 0.25} - 0.8 + 50.41 \\ &= \underline{5.25 - 0.8} + 50.41 \\ &= \underline{4.45 + 50.41} \\ &= 54.86 \end{aligned}$$

$$\begin{aligned} & (\underline{5.4 \times 5.7}) \div 9.5 + (3.6)^2 - 4.3 + 9.1 \\ &= 30.78 \div 9.5 + \underline{(3.6)^2} - 4.3 + 9.1 \\ &= \underline{30.78 \div 9.5} + 12.96 - 4.3 + 9.1 \\ &= \underline{3.24 + 12.96} - 4.3 + 9.1 \\ &= \underline{16.2 - 4.3} + 9.1 \\ &= \underline{11.9 + 9.1} \\ &= 21 \end{aligned}$$

$$\begin{aligned} & 5.7 \times (9.2 + \underline{(6.7)^2} - (7.3)^2) \div 0.2 \\ &= 5.7 \times (9.2 + 44.89 - \underline{(7.3)^2}) \div 0.2 \\ &= 5.7 \times (\underline{9.2 + 44.89} - 53.29) \div 0.2 \\ &= 5.7 \times (\underline{54.09 - 53.29}) \div 0.2 \\ &= \underline{5.7 \times 0.8} \div 0.2 \\ &= \underline{4.56 \div 0.2} \\ &= 22.8 \end{aligned}$$

$$\begin{aligned} & (\underline{8.7 + 3.4} - 1.1) \times ((1.2)^2 \div (5.5 - 1.5)) \\ &= (\underline{12.1 - 1.1}) \times ((1.2)^2 \div (5.5 - 1.5)) \\ &= 11 \times ((1.2)^2 \div \underline{(5.5 - 1.5)}) \\ &= 11 \times (\underline{(1.2)^2} \div 4) \\ &= 11 \times (\underline{1.44 \div 4}) \\ &= \underline{11 \times 0.36} \\ &= 3.96 \end{aligned}$$

$$\begin{aligned} & (\underline{1.8 + 2.4})^2 \times (9.2 - 7.2)^2 \div 1.2 \\ &= (4.2)^2 \times (\underline{9.2 - 7.2})^2 \div 1.2 \\ &= \underline{(4.2)^2} \times 2^2 \div 1.2 \\ &= 17.64 \times \underline{2^2} \div 1.2 \\ &= \underline{17.64 \times 4} \div 1.2 \\ &= \underline{70.56 \div 1.2} \\ &= 58.8 \end{aligned}$$

$$\begin{aligned} & (8.7 \div (\underline{5.3 - 0.5} + 3.9))^2 \times (9.2)^2 \\ &= (8.7 \div (\underline{4.8 + 3.9}))^2 \times (9.2)^2 \\ &= (\underline{8.7 \div 8.7})^2 \times (9.2)^2 \\ &= \underline{1^2} \times (9.2)^2 \\ &= 1 \times \underline{(9.2)^2} \\ &= \underline{1 \times 84.64} \\ &= 84.64 \end{aligned}$$