

## Order of Operations with Decimals (J)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Simplify each expression using the correct order of operations.

$$(6.4)^2 + 1.8 \div (4.7 - 3.5) \times (1.2)^2$$

$$(1.8 \div (0.4)^2) \times 6.4 + 8.3 - (3.3)^2$$

$$(9.6 \div 1.2) \times 3.1 - 7.8 + 6.7 - (2.3)^2$$

$$((0.4)^2 \times 7.5) \div 2.4 + (4.4)^2 - 4.7$$

$$(9.9 \div 2.2) \times 9.5 - 3.75 + 1.25 - (5.2)^2$$

$$((1.3)^2 + (3.3)^2) \times ((6.9 - 2.1) \div 3.2)$$

# Order of Operations with Decimals (J) Answers

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Simplify each expression using the correct order of operations.

$$\begin{aligned}(6.4)^2 + 1.8 \div (4.7 - 3.5) \times (1.2)^2 \\ &= \underline{(6.4)^2} + 1.8 \div 1.2 \times (1.2)^2 \\ &= 40.96 + 1.8 \div 1.2 \times \underline{(1.2)^2} \\ &= 40.96 + \underline{1.8 \div 1.2} \times 1.44 \\ &= 40.96 + \underline{1.5 \times 1.44} \\ &= \underline{40.96 + 2.16} \\ &= 43.12\end{aligned}$$

$$\begin{aligned}(1.8 \div (0.4)^2) \times 6.4 + 8.3 - (3.3)^2 \\ &= \underline{(1.8 \div 0.16)} \times 6.4 + 8.3 - (3.3)^2 \\ &= 11.25 \times 6.4 + 8.3 - \underline{(3.3)^2} \\ &= \underline{11.25 \times 6.4} + 8.3 - 10.89 \\ &= \underline{72 + 8.3} - 10.89 \\ &= \underline{80.3 - 10.89} \\ &= 69.41\end{aligned}$$

$$\begin{aligned}(\underline{9.6 \div 1.2}) \times 3.1 - 7.8 + 6.7 - (2.3)^2 \\ &= 8 \times 3.1 - 7.8 + 6.7 - \underline{(2.3)^2} \\ &= \underline{8 \times 3.1} - 7.8 + 6.7 - 5.29 \\ &= \underline{24.8 - 7.8} + 6.7 - 5.29 \\ &= \underline{17 + 6.7} - 5.29 \\ &= \underline{23.7 - 5.29} \\ &= 18.41\end{aligned}$$

$$\begin{aligned}(\underline{(0.4)^2} \times 7.5) \div 2.4 + (4.4)^2 - 4.7 \\ &= \underline{(0.16 \times 7.5)} \div 2.4 + (4.4)^2 - 4.7 \\ &= 1.2 \div 2.4 + \underline{(4.4)^2} - 4.7 \\ &= \underline{1.2 \div 2.4} + 19.36 - 4.7 \\ &= \underline{0.5 + 19.36} - 4.7 \\ &= \underline{19.86 - 4.7} \\ &= 15.16\end{aligned}$$

$$\begin{aligned}(\underline{9.9 \div 2.2}) \times 9.5 - 3.75 + 1.25 - (5.2)^2 \\ &= 4.5 \times 9.5 - 3.75 + 1.25 - \underline{(5.2)^2} \\ &= \underline{4.5 \times 9.5} - 3.75 + 1.25 - 27.04 \\ &= \underline{42.75 - 3.75} + 1.25 - 27.04 \\ &= \underline{39 + 1.25} - 27.04 \\ &= \underline{40.25 - 27.04} \\ &= 13.21\end{aligned}$$

$$\begin{aligned}(\underline{(1.3)^2} + (3.3)^2) \times ((6.9 - 2.1) \div 3.2) \\ &= (1.69 + \underline{(3.3)^2}) \times ((6.9 - 2.1) \div 3.2) \\ &= \underline{(1.69 + 10.89)} \times ((6.9 - 2.1) \div 3.2) \\ &= 12.58 \times ((\underline{6.9 - 2.1}) \div 3.2) \\ &= 12.58 \times \underline{(4.8 \div 3.2)} \\ &= \underline{12.58 \times 1.5} \\ &= 18.87\end{aligned}$$