

# Order of Operations with Decimals (F)

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

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

Simplify each expression using the correct order of operations.

$$(1.7 + 2.3)^3 \div (9.8 - 1.8) \times (1.4 + 3.5)$$

$$(1.7 + 2.4) \times 7.5 \div 2.5 - (3.2)^2 + 1.25$$

$$(9.6)^2 \times ((2.6 - 1.6 + 5.1) \div 6.1)^2$$

$$((1.5)^2 \div 4.5) \times (2.2)^2 + 2.6 - 1.4$$

$$(3.9 \div (6.9 - 5.9)^3) \times (9.2 + 2.7 + 5.6)$$

$$9.1 \times ((8.5 - 6.8 + 2.1) \div (6.9 - 3.1))^3$$

# Order of Operations with Decimals (F) Answers

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

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

Simplify each expression using the correct order of operations.

$$\begin{aligned} & (\underline{1.7 + 2.3})^3 \div (9.8 - 1.8) \times (1.4 + 3.5) \\ &= 4^3 \div (\underline{9.8 - 1.8}) \times (1.4 + 3.5) \\ &= 4^3 \div 8 \times (\underline{1.4 + 3.5}) \\ &= \underline{4^3} \div 8 \times 4.9 \\ &= \underline{64 \div 8} \times 4.9 \\ &= \underline{8 \times 4.9} \\ &= 39.2 \end{aligned}$$

$$\begin{aligned} & (\underline{1.7 + 2.4}) \times 7.5 \div 2.5 - (3.2)^2 + 1.25 \\ &= 4.1 \times 7.5 \div 2.5 - \underline{(3.2)^2} + 1.25 \\ &= \underline{4.1 \times 7.5} \div 2.5 - 10.24 + 1.25 \\ &= \underline{30.75 \div 2.5} - 10.24 + 1.25 \\ &= \underline{12.3 - 10.24} + 1.25 \\ &= \underline{2.06 + 1.25} \\ &= 3.31 \end{aligned}$$

$$\begin{aligned} & (9.6)^2 \times ((\underline{2.6 - 1.6} + 5.1) \div 6.1)^2 \\ &= (9.6)^2 \times ((\underline{1 + 5.1}) \div 6.1)^2 \\ &= (9.6)^2 \times (\underline{6.1 \div 6.1})^2 \\ &= \underline{(9.6)^2} \times 1^2 \\ &= 92.16 \times \underline{1^2} \\ &= \underline{92.16 \times 1} \\ &= 92.16 \end{aligned}$$

$$\begin{aligned} & ((\underline{1.5})^2 \div 4.5) \times (2.2)^2 + 2.6 - 1.4 \\ &= (\underline{2.25 \div 4.5}) \times (2.2)^2 + 2.6 - 1.4 \\ &= 0.5 \times \underline{(2.2)^2} + 2.6 - 1.4 \\ &= \underline{0.5 \times 4.84} + 2.6 - 1.4 \\ &= \underline{2.42 + 2.6} - 1.4 \\ &= \underline{5.02 - 1.4} \\ &= 3.62 \end{aligned}$$

$$\begin{aligned} & (3.9 \div (\underline{6.9 - 5.9})^3) \times (9.2 + 2.7 + 5.6) \\ &= (3.9 \div \underline{1^3}) \times (9.2 + 2.7 + 5.6) \\ &= (\underline{3.9 \div 1}) \times (9.2 + 2.7 + 5.6) \\ &= 3.9 \times (\underline{9.2 + 2.7} + 5.6) \\ &= 3.9 \times (\underline{11.9 + 5.6}) \\ &= \underline{3.9 \times 17.5} \\ &= 68.25 \end{aligned}$$

$$\begin{aligned} & 9.1 \times ((\underline{8.5 - 6.8} + 2.1) \div (6.9 - 3.1))^3 \\ &= 9.1 \times ((\underline{1.7 + 2.1}) \div (6.9 - 3.1))^3 \\ &= 9.1 \times (3.8 \div (\underline{6.9 - 3.1}))^3 \\ &= 9.1 \times (\underline{3.8 \div 3.8})^3 \\ &= 9.1 \times \underline{1^3} \\ &= \underline{9.1 \times 1} \\ &= 9.1 \end{aligned}$$