

Order of Operations with Decimals (C)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(8.4)^2 - 3.1 \times (2.5 + 3.5)$$

$$(1.2 + 1.4) \times (3.5)^2 - 9.6$$

$$(5.3 + 7.2 - 7.6)^2 \div 9.8$$

$$(2.5)^2 + 2.5 \times (9.9 - 3.5)$$

$$((1.5)^2 + 8.3) \times 6.4 - 7.9$$

$$(9.6)^2 + 2.5 \times (9.4 - 7.6)$$

$$((2.5)^2 + 3.2) \times 4.6 \div 1.4$$

$$(5.2)^2 - 1.7 \times (1.2 + 5.7)$$

Order of Operations with Decimals (C) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned}(8.4)^2 - 3.1 \times (2.5 + 3.5) \\&= (8.4)^2 - 3.1 \times 6 \\&= 70.56 - 3.1 \times 6 \\&= 70.56 - 18.6 \\&= 51.96\end{aligned}$$

$$\begin{aligned}(1.2 + 1.4) \times (3.5)^2 - 9.6 \\&= 2.6 \times (3.5)^2 - 9.6 \\&= 2.6 \times 12.25 - 9.6 \\&= 31.85 - 9.6 \\&= 22.25\end{aligned}$$

$$\begin{aligned}(5.3 + 7.2 - 7.6)^2 \div 9.8 \\&= (12.5 - 7.6)^2 \div 9.8 \\&= (4.9)^2 \div 9.8 \\&= 24.01 \div 9.8 \\&= 2.45\end{aligned}$$

$$\begin{aligned}(2.5)^2 + 2.5 \times (9.9 - 3.5) \\&= (2.5)^2 + 2.5 \times 6.4 \\&= 6.25 + 2.5 \times 6.4 \\&= 6.25 + 16 \\&= 22.25\end{aligned}$$

$$\begin{aligned}((1.5)^2 + 8.3) \times 6.4 - 7.9 \\&= (2.25 + 8.3) \times 6.4 - 7.9 \\&= 10.55 \times 6.4 - 7.9 \\&= 67.52 - 7.9 \\&= 59.62\end{aligned}$$

$$\begin{aligned}(9.6)^2 + 2.5 \times (9.4 - 7.6) \\&= (9.6)^2 + 2.5 \times 1.8 \\&= 92.16 + 2.5 \times 1.8 \\&= 92.16 + 4.5 \\&= 96.66\end{aligned}$$

$$\begin{aligned}((2.5)^2 + 3.2) \times 4.6 \div 1.4 \\&= (6.25 + 3.2) \times 4.6 \div 1.4 \\&= 9.45 \times 4.6 \div 1.4 \\&= 43.47 \div 1.4 \\&= 31.05\end{aligned}$$

$$\begin{aligned}(5.2)^2 - 1.7 \times (1.2 + 5.7) \\&= (5.2)^2 - 1.7 \times 6.9 \\&= 27.04 - 1.7 \times 6.9 \\&= 27.04 - 11.73 \\&= 15.31\end{aligned}$$