

Order of Operations with Decimals (C)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(8.7 \div 2.9)^2 \times 2.5 - 7.3 + 7.7 - 5.7$$

$$(3.1)^2 + 4.7 \times 1.9 \div (9.3 - 4.6) \times 6.9$$

$$(5.6)^2 \times ((6.4 + 6.6 - 2.8) \div 6.8)^2$$

$$(6.6 + (5.3)^2 - (1.9)^2) \div (1.4 \times 0.6)$$

$$(7.8 \div 0.75) \times 0.8 - (1.3)^2 + (6.4)^2$$

$$(4.5)^2 \div (5.8 - 4.3) \times 3.8 + (0.2)^2$$

Order of Operations with Decimals (C) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & (8.7 \div 2.9)^2 \times 2.5 - 7.3 + 7.7 - 5.7 \\ &= \underline{3^2} \times 2.5 - 7.3 + 7.7 - 5.7 \\ &= \underline{9 \times 2.5} - 7.3 + 7.7 - 5.7 \\ &= \underline{22.5 - 7.3} + 7.7 - 5.7 \\ &= \underline{15.2 + 7.7} - 5.7 \\ &= \underline{22.9 - 5.7} \\ &= 17.2 \end{aligned}$$

$$\begin{aligned} & (3.1)^2 + 4.7 \times 1.9 \div (9.3 - 4.6) \times 6.9 \\ &= \underline{(3.1)^2} + 4.7 \times 1.9 \div 4.7 \times 6.9 \\ &= 9.61 + \underline{4.7 \times 1.9} \div 4.7 \times 6.9 \\ &= 9.61 + \underline{8.93 \div 4.7} \times 6.9 \\ &= 9.61 + \underline{1.9 \times 6.9} \\ &= \underline{9.61 + 13.11} \\ &= 22.72 \end{aligned}$$

$$\begin{aligned} & (5.6)^2 \times ((6.4 + 6.6 - 2.8) \div 6.8)^2 \\ &= (5.6)^2 \times ((\underline{13 - 2.8}) \div 6.8)^2 \\ &= (5.6)^2 \times (\underline{10.2 \div 6.8})^2 \\ &= \underline{(5.6)^2} \times (1.5)^2 \\ &= 31.36 \times \underline{(1.5)^2} \\ &= \underline{31.36 \times 2.25} \\ &= 70.56 \end{aligned}$$

$$\begin{aligned} & (6.6 + \underline{(5.3)^2} - (1.9)^2) \div (1.4 \times 0.6) \\ &= (6.6 + 28.09 - \underline{(1.9)^2}) \div (1.4 \times 0.6) \\ &= (\underline{6.6 + 28.09} - 3.61) \div (1.4 \times 0.6) \\ &= (\underline{34.69 - 3.61}) \div (1.4 \times 0.6) \\ &= 31.08 \div \underline{(1.4 \times 0.6)} \\ &= \underline{31.08 \div 0.84} \\ &= 37 \end{aligned}$$

$$\begin{aligned} & (\underline{7.8 \div 0.75}) \times 0.8 - (1.3)^2 + (6.4)^2 \\ &= 10.4 \times 0.8 - \underline{(1.3)^2} + (6.4)^2 \\ &= 10.4 \times 0.8 - 1.69 + \underline{(6.4)^2} \\ &= \underline{10.4 \times 0.8} - 1.69 + 40.96 \\ &= \underline{8.32 - 1.69} + 40.96 \\ &= \underline{6.63 + 40.96} \\ &= 47.59 \end{aligned}$$

$$\begin{aligned} & (4.5)^2 \div (\underline{5.8 - 4.3}) \times 3.8 + (0.2)^2 \\ &= \underline{(4.5)^2} \div 1.5 \times 3.8 + (0.2)^2 \\ &= 20.25 \div 1.5 \times 3.8 + \underline{(0.2)^2} \\ &= \underline{20.25 \div 1.5} \times 3.8 + 0.04 \\ &= \underline{13.5 \times 3.8} + 0.04 \\ &= \underline{51.3 + 0.04} \\ &= 51.34 \end{aligned}$$