

Order of Operations with Decimals (C)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$0.7 + (-8.8) \div 2.2 \times ((-8.7)^2 - (8.7)^2)$$

$$(9.9 - 1.8 \times 5.5)^3 \div 1.6 + (-4.4) + 7.4$$

$$5.7 - (-7.1)^2 + (-1.6)^2 \times ((-5.5) \div (-0.2))$$

Order of Operations with Decimals (C) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & 0.7 + (-8.8) \div 2.2 \times \left(\underline{(-8.7)^2} - (8.7)^2 \right) \\ &= 0.7 + (-8.8) \div 2.2 \times \left(75.69 - \underline{(8.7)^2} \right) \\ &= 0.7 + (-8.8) \div 2.2 \times \underline{(75.69 - 75.69)} \\ &= 0.7 + \underline{(-8.8) \div 2.2} \times 0 \\ &= 0.7 + \underline{(-4) \times 0} \\ &= \underline{0.7 + 0} \\ &= 0.7 \end{aligned}$$

$$\begin{aligned} & (9.9 - \underline{1.8 \times 5.5})^3 \div 1.6 + (-4.4) + 7.4 \\ &= \underline{(9.9 - 9.9)}^3 \div 1.6 + (-4.4) + 7.4 \\ &= \underline{0^3} \div 1.6 + (-4.4) + 7.4 \\ &= \underline{0 \div 1.6} + (-4.4) + 7.4 \\ &= \underline{0 + (-4.4)} + 7.4 \\ &= \underline{(-4.4) + 7.4} \\ &= 3 \end{aligned}$$

$$\begin{aligned} & 5.7 - (-7.1)^2 + (-1.6)^2 \times \left(\underline{(-5.5) \div (-0.2)} \right) \\ &= 5.7 - \underline{(-7.1)^2} + (-1.6)^2 \times 27.5 \\ &= 5.7 - 50.41 + \underline{(-1.6)^2} \times 27.5 \\ &= 5.7 - 50.41 + \underline{2.56 \times 27.5} \\ &= \underline{5.7 - 50.41} + 70.4 \\ &= \underline{(-44.71) + 70.4} \\ &= 25.69 \end{aligned}$$