

Order of Operations with Decimals (E)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\left((-8.9)^2 \times (8.3 - 4.4 + (-3.9))\right)^3 \div 7.2$$

$$\left(\left(-8.6\right) + 7.4\right) \times 6.8 \div (0.8)^2 - (7.2)^2$$

$$8.3 + (2.5)^2 - (-8.9) \div (0.2 \times 2.5 \times (-0.5))$$

Order of Operations with Decimals (E) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & ((-8.9)^2 \times (8.3 - 4.4 + (-3.9)))^3 \div 7.2 \\ & = ((-8.9)^2 \times (3.9 + (-3.9)))^3 \div 7.2 \\ & = ((-8.9)^2 \times 0)^3 \div 7.2 \\ & = (79.21 \times 0)^3 \div 7.2 \\ & = 0^3 \div 7.2 \\ & = 0 \div 7.2 \\ & = 0 \end{aligned}$$

$$\begin{aligned} & (((-8.6) + 7.4) \times 6.8) \div (0.8)^2 - (7.2)^2 \\ & = ((-1.2) \times 6.8) \div (0.8)^2 - (7.2)^2 \\ & = (-8.16) \div (0.8)^2 - (7.2)^2 \\ & = (-8.16) \div 0.64 - (7.2)^2 \\ & = (-8.16) \div 0.64 - 51.84 \\ & = (-12.75) - 51.84 \\ & = -64.59 \end{aligned}$$

$$\begin{aligned} & 8.3 + (2.5)^2 - (-8.9) \div (0.2 \times 2.5 \times (-0.5)) \\ & = 8.3 + (2.5)^2 - (-8.9) \div (0.5 \times (-0.5)) \\ & = 8.3 + (2.5)^2 - (-8.9) \div (-0.25) \\ & = 8.3 + 6.25 - (-8.9) \div (-0.25) \\ & = 8.3 + 6.25 - 35.6 \\ & = 14.55 - 35.6 \\ & = -21.05 \end{aligned}$$