

Order of Operations with Decimals (F)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$2.8 \div (-2.8) \times ((-5.3)^2 - (-0.8) + 8.8 - (-0.9))$$

$$8.3 \times (((-7.5) - 0.5) \div (5.8 + (-7.8))^3)^2$$

$$(5.6)^2 \div (-6.4) + (-4.5) \times (((-1.4) - (-0.4)) \times 3.8)$$

Order of Operations with Decimals (F) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & 2.8 \div (-2.8) \times \left(\underline{(-5.3)^2} - (-0.8) + 8.8 - (-0.9) \right) \\ &= 2.8 \div (-2.8) \times \left(\underline{28.09 - (-0.8)} + 8.8 - (-0.9) \right) \\ &= 2.8 \div (-2.8) \times \left(\underline{28.89 + 8.8} - (-0.9) \right) \\ &= 2.8 \div (-2.8) \times \left(\underline{37.69 - (-0.9)} \right) \\ &= \underline{2.8 \div (-2.8)} \times 38.59 \\ &= \underline{(-1) \times 38.59} \\ &= \underline{-38.59} \end{aligned}$$

$$\begin{aligned} & 8.3 \times \left(\left(\underline{(-7.5) - 0.5} \right) \div (5.8 + (-7.8))^3 \right)^2 \\ &= 8.3 \times \left((-8) \div \left(\underline{5.8 + (-7.8)} \right)^3 \right)^2 \\ &= 8.3 \times \left((-8) \div \underline{(-2)^3} \right)^2 \\ &= 8.3 \times \left(\underline{(-8) \div (-8)} \right)^2 \\ &= 8.3 \times \underline{1^2} \\ &= \underline{8.3 \times 1} \\ &= \underline{8.3} \end{aligned}$$

$$\begin{aligned} & (5.6)^2 \div (-6.4) + (-4.5) \times \left(\left(\underline{(-1.4) - (-0.4)} \right) \times 3.8 \right) \\ &= (5.6)^2 \div (-6.4) + (-4.5) \times \left(\underline{(-1) \times 3.8} \right) \\ &= \underline{(5.6)^2} \div (-6.4) + (-4.5) \times (-3.8) \\ &= \underline{31.36 \div (-6.4)} + (-4.5) \times (-3.8) \\ &= (-4.9) + \underline{(-4.5) \times (-3.8)} \\ &= \underline{(-4.9) + 17.1} \\ &= \underline{12.2} \end{aligned}$$