

Order of Operations with Decimals (H)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(9.7)^2 + 4.3 \times (4.6 \div (-2.3) - 3.9)$$

$$((-8.5) - (-6.6) + (-9.6)) \times 1.8 \div (-0.6)^2$$

$$(1.25 - (0.9)^2 + (-2.8)) \times (3.75 \div (-0.5))$$

$$(8.5 - (-4.2) \times (-2.1) + (0.4)^2) \div (-3.2)$$

$$((-7.2) + 3.5 \times 5.8 - 9.2)^2 \div 4.5$$

$$(2.8)^2 \div (3.1 - (-2.5)) \times ((-5.4) \div 1.7)$$

Order of Operations with Decimals (H) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & (9.7)^2 + 4.3 \times (4.6 \div (-2.3) - 3.9) \\ &= (9.7)^2 + 4.3 \times ((-2) - 3.9) \\ &= \underline{(9.7)^2} + 4.3 \times (-5.9) \\ &= 94.09 + \underline{4.3 \times (-5.9)} \\ &= \underline{94.09 + (-25.37)} \\ &= 68.72 \end{aligned}$$

$$\begin{aligned} & ((-8.5) - (-6.6) + (-9.6)) \times 1.8 \div (-0.6)^2 \\ &= \underline{((-1.9) + (-9.6))} \times 1.8 \div (-0.6)^2 \\ &= (-11.5) \times 1.8 \div \underline{(-0.6)^2} \\ &= \underline{(-11.5) \times 1.8} \div 0.36 \\ &= \underline{(-20.7) \div 0.36} \\ &= -57.5 \end{aligned}$$

$$\begin{aligned} & (1.25 - (0.9)^2 + (-2.8)) \times (3.75 \div (-0.5)) \\ &= \underline{(1.25 - 0.81)} + (-2.8) \times (3.75 \div (-0.5)) \\ &= \underline{(0.44 + (-2.8))} \times (3.75 \div (-0.5)) \\ &= (-2.36) \times \underline{(3.75 \div (-0.5))} \\ &= \underline{(-2.36) \times (-7.5)} \\ &= 17.7 \end{aligned}$$

$$\begin{aligned} & (8.5 - (-4.2) \times (-2.1) + (0.4)^2) \div (-3.2) \\ &= (8.5 - \underline{(-4.2) \times (-2.1)} + 0.16) \div (-3.2) \\ &= \underline{(8.5 - 8.82)} + 0.16 \div (-3.2) \\ &= \underline{((-0.32) + 0.16)} \div (-3.2) \\ &= \underline{(-0.16) \div (-3.2)} \\ &= 0.05 \end{aligned}$$

$$\begin{aligned} & ((-7.2) + 3.5 \times 5.8 - 9.2)^2 \div 4.5 \\ &= \underline{((-7.2) + 20.3 - 9.2)}^2 \div 4.5 \\ &= \underline{(13.1 - 9.2)}^2 \div 4.5 \\ &= \underline{(3.9)^2} \div 4.5 \\ &= \underline{15.21 \div 4.5} \\ &= 3.38 \end{aligned}$$

$$\begin{aligned} & (2.8)^2 \div (3.1 - (-2.5)) \times ((-5.4) + 1.7) \\ &= (2.8)^2 \div 5.6 \times \underline{((-5.4) + 1.7)} \\ &= \underline{(2.8)^2} \div 5.6 \times (-3.7) \\ &= \underline{7.84 \div 5.6} \times (-3.7) \\ &= \underline{1.4 \times (-3.7)} \\ &= -5.18 \end{aligned}$$