

Order of Operations with Decimals (A)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$0.75 \times 3.2 + (9.1)^2 \div ((-2.3) - (-0.9))^2$$

$$((-5.4)^2 \div 3.6) \times 3.1 - (-2.2)^2 + (-3.2)$$

$$(((-8.9) + (-3.9)) \div 3.2) \times (-3.2) - 7.3 + (-4.6)^2$$

Order of Operations with Decimals (A) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & 0.75 \times 3.2 + (9.1)^2 \div \left(\underline{(-2.3) - (-0.9)} \right)^2 \\ & = 0.75 \times 3.2 + \underline{(9.1)^2} \div (-1.4)^2 \\ & = 0.75 \times 3.2 + 82.81 \div \underline{(-1.4)^2} \\ & = \underline{0.75 \times 3.2} + 82.81 \div 1.96 \\ & = 2.4 + \underline{82.81 \div 1.96} \\ & = \underline{2.4 + 42.25} \\ & = 44.65 \end{aligned}$$

$$\begin{aligned} & \left(\underline{(-5.4)^2} \div 3.6 \right) \times 3.1 - (-2.2)^2 + (-3.2) \\ & = \left(\underline{29.16 \div 3.6} \right) \times 3.1 - (-2.2)^2 + (-3.2) \\ & = 8.1 \times 3.1 - \underline{(-2.2)^2} + (-3.2) \\ & = \underline{8.1 \times 3.1} - 4.84 + (-3.2) \\ & = \underline{25.11 - 4.84} + (-3.2) \\ & = \underline{20.27 + (-3.2)} \\ & = 17.07 \end{aligned}$$

$$\begin{aligned} & \left(\left(\underline{(-8.9) + (-3.9)} \right) \div 3.2 \right) \times (-3.2) - 7.3 + (-4.6)^2 \\ & = \left(\underline{(-12.8) \div 3.2} \right) \times (-3.2) - 7.3 + (-4.6)^2 \\ & = (-4) \times (-3.2) - 7.3 + \underline{(-4.6)^2} \\ & = \underline{(-4) \times (-3.2)} - 7.3 + 21.16 \\ & = \underline{12.8 - 7.3} + 21.16 \\ & = \underline{5.5 + 21.16} \\ & = 26.66 \end{aligned}$$

Order of Operations with Decimals (B)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(2.5)^2 - (-5.6) \times ((-0.6) + 6.3 \div (2.1 \times (-1.2)))$$

$$(-2.1)^2 - 8.6 \times (-2.9) + (-1.8) \div (1.4 \div 3.5)$$

$$(6.6)^2 \div 1.1 + 7.3 - 1.4 \times ((-2.2) - (-3.6))$$

Order of Operations with Decimals (B) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned}(2.5)^2 - (-5.6) \times ((-0.6) + 6.3 \div (2.1 \times (-1.2))) \\ &= (2.5)^2 - (-5.6) \times ((-0.6) + 6.3 \div (-2.52)) \\ &= (2.5)^2 - (-5.6) \times ((-0.6) + (-2.5)) \\ &= (2.5)^2 - (-5.6) \times (-3.1) \\ &= 6.25 - (-5.6) \times (-3.1) \\ &= 6.25 - 17.36 \\ &= -11.11\end{aligned}$$

$$\begin{aligned}(-2.1)^2 - 8.6 \times (-2.9) + (-1.8) \div (1.4 \div 3.5) \\ &= (-2.1)^2 - 8.6 \times (-2.9) + (-1.8) \div 0.4 \\ &= 4.41 - 8.6 \times (-2.9) + (-1.8) \div 0.4 \\ &= 4.41 - (-24.94) + (-1.8) \div 0.4 \\ &= 4.41 - (-24.94) + (-4.5) \\ &= 29.35 + (-4.5) \\ &= 24.85\end{aligned}$$

$$\begin{aligned}(6.6)^2 \div 1.1 + 7.3 - 1.4 \times ((-2.2) - (-3.6)) \\ &= (6.6)^2 \div 1.1 + 7.3 - 1.4 \times 1.4 \\ &= 43.56 \div 1.1 + 7.3 - 1.4 \times 1.4 \\ &= 39.6 + 7.3 - 1.4 \times 1.4 \\ &= 39.6 + 7.3 - 1.96 \\ &= 46.9 - 1.96 \\ &= 44.94\end{aligned}$$

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.

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

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

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

Order of Operations with Decimals (D)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$((-3.4) \div (-8.5)) \times (-5.5) + (9.5)^2 - (2.4)^2$$

$$(2.4)^2 \div ((-0.2) - 2.2) \times (-8.4) + 5.8 \times (-2.7)$$

$$3.2 + 4.4 - (0.2)^2 \times (2.1 \div (-2.1))^3$$

Order of Operations with Decimals (D) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & \left(\underline{(-3.4) \div (-8.5)} \right) \times (-5.5) + (9.5)^2 - (2.4)^2 \\ & = 0.4 \times (-5.5) + \underline{(9.5)^2} - (2.4)^2 \\ & = 0.4 \times (-5.5) + 90.25 - \underline{(2.4)^2} \\ & = \underline{0.4 \times (-5.5)} + 90.25 - 5.76 \\ & = \underline{(-2.2) + 90.25} - 5.76 \\ & = \underline{88.05 - 5.76} \\ & = 82.29 \end{aligned}$$

$$\begin{aligned} & (2.4)^2 \div \left(\underline{(-0.2) - 2.2} \right) \times (-8.4) + 5.8 \times (-2.7) \\ & = \underline{(2.4)^2} \div (-2.4) \times (-8.4) + 5.8 \times (-2.7) \\ & = \underline{5.76 \div (-2.4)} \times (-8.4) + 5.8 \times (-2.7) \\ & = \underline{(-2.4) \times (-8.4)} + 5.8 \times (-2.7) \\ & = 20.16 + \underline{5.8 \times (-2.7)} \\ & = \underline{20.16 + (-15.66)} \\ & = 4.5 \end{aligned}$$

$$\begin{aligned} & 3.2 + 4.4 - (0.2)^2 \times \left(\underline{2.1 \div (-2.1)} \right)^3 \\ & = 3.2 + 4.4 - \underline{(0.2)^2} \times (-1)^3 \\ & = 3.2 + 4.4 - 0.04 \times \underline{(-1)^3} \\ & = 3.2 + 4.4 - \underline{0.04 \times (-1)} \\ & = \underline{3.2 + 4.4} - (-0.04) \\ & = \underline{7.6 - (-0.04)} \\ & = 7.64 \end{aligned}$$

Order of Operations with Decimals (E)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

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

Order of Operations with Decimals (E) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

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

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

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

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.

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

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

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

Order of Operations with Decimals (G)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$((-7.5) \times (2.8)^2) \div 1.25 + 6.4 - 9.6 - (-2.5)$$

$$((1.8)^2 \div (-1.8)) \times (-9.1) - (6.3)^2 + 4.3$$

$$((-2.1) + 2.1) \div 8.8 \times (7.3)^2 - (-2.2)^2$$

Order of Operations with Decimals (G) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & ((-7.5) \times (2.8)^2) \div 1.25 + 6.4 - 9.6 - (-2.5) \\ &= ((-7.5) \times 7.84) \div 1.25 + 6.4 - 9.6 - (-2.5) \\ &= (-58.8) \div 1.25 + 6.4 - 9.6 - (-2.5) \\ &= (-47.04) + 6.4 - 9.6 - (-2.5) \\ &= (-40.64) - 9.6 - (-2.5) \\ &= (-50.24) - (-2.5) \\ &= -47.74 \end{aligned}$$

$$\begin{aligned} & ((1.8)^2 \div (-1.8)) \times (-9.1) - (6.3)^2 + 4.3 \\ &= (3.24 \div (-1.8)) \times (-9.1) - (6.3)^2 + 4.3 \\ &= (-1.8) \times (-9.1) - (6.3)^2 + 4.3 \\ &= (-1.8) \times (-9.1) - 39.69 + 4.3 \\ &= 16.38 - 39.69 + 4.3 \\ &= (-23.31) + 4.3 \\ &= -19.01 \end{aligned}$$

$$\begin{aligned} & ((-2.1) + 2.1) \div 8.8 \times (7.3)^2 - (-2.2)^2 \\ &= 0 \div 8.8 \times (7.3)^2 - (-2.2)^2 \\ &= 0 \div 8.8 \times 53.29 - (-2.2)^2 \\ &= 0 \div 8.8 \times 53.29 - 4.84 \\ &= 0 \times 53.29 - 4.84 \\ &= 0 - 4.84 \\ &= -4.84 \end{aligned}$$

Order of Operations with Decimals (H)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(-3.5) \times (-1.8) - (0.2)^2 + 3.1 \div (0.6 - (-1.9))$$

$$((-5.9) - 7.2 + (-3.2)^2) \times (7.1 \div (-7.1))^2$$

$$((1.4)^2 - 2.6 \times (-6.5) + (-1.8) \div 0.1) \times 5.5$$

Order of Operations with Decimals (H) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & (-3.5) \times (-1.8) - (0.2)^2 + 3.1 \div (0.6 - (-1.9)) \\ &= (-3.5) \times (-1.8) - (0.2)^2 + 3.1 \div 2.5 \\ &= \underline{(-3.5) \times (-1.8)} - 0.04 + 3.1 \div 2.5 \\ &= 6.3 - 0.04 + \underline{3.1 \div 2.5} \\ &= \underline{6.3 - 0.04} + 1.24 \\ &= \underline{6.26 + 1.24} \\ &= 7.5 \end{aligned}$$

$$\begin{aligned} & ((-5.9) - 7.2 + \underline{(-3.2)^2}) \times (7.1 \div (-7.1))^2 \\ &= (\underline{(-5.9) - 7.2} + 10.24) \times (7.1 \div (-7.1))^2 \\ &= (\underline{(-13.1) + 10.24}) \times (7.1 \div (-7.1))^2 \\ &= (-2.86) \times (\underline{7.1 \div (-7.1)})^2 \\ &= (-2.86) \times \underline{(-1)^2} \\ &= \underline{(-2.86) \times 1} \\ &= -2.86 \end{aligned}$$

$$\begin{aligned} & (\underline{(1.4)^2} - 2.6 \times (-6.5) + (-1.8) \div 0.1) \times 5.5 \\ &= (1.96 - \underline{2.6 \times (-6.5)} + (-1.8) \div 0.1) \times 5.5 \\ &= (1.96 - (-16.9) + \underline{(-1.8) \div 0.1}) \times 5.5 \\ &= (\underline{1.96 - (-16.9)} + (-18)) \times 5.5 \\ &= (\underline{18.86 + (-18)}) \times 5.5 \\ &= \underline{0.86 \times 5.5} \\ &= 4.73 \end{aligned}$$

Order of Operations with Decimals (I)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(4.2)^2 \div ((-1.5) \times 9.8 + 3.1 - 8.2 + 5.1)$$

$$(-1.1) + (-1.4)^2 - (-0.1) \div (2.5 \times (0.4)^2)$$

$$(-5.4) - (1.4)^2 + (0.2)^2 \div ((-1.6) \times (-2.5))$$

Order of Operations with Decimals (I) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & (4.2)^2 \div \left(\underline{(-1.5) \times 9.8} + 3.1 - 8.2 + 5.1 \right) \\ &= (4.2)^2 \div \left(\underline{(-14.7) + 3.1} - 8.2 + 5.1 \right) \\ &= (4.2)^2 \div \left(\underline{(-11.6) - 8.2} + 5.1 \right) \\ &= (4.2)^2 \div \left(\underline{(-19.8) + 5.1} \right) \\ &= \underline{(4.2)^2} \div (-14.7) \\ &= \underline{17.64} \div (-14.7) \\ &= -1.2 \end{aligned}$$

$$\begin{aligned} & (-1.1) + (-1.4)^2 - (-0.1) \div \left(2.5 \times \underline{(0.4)^2} \right) \\ &= (-1.1) + (-1.4)^2 - (-0.1) \div \left(\underline{2.5 \times 0.16} \right) \\ &= (-1.1) + \underline{(-1.4)^2} - (-0.1) \div 0.4 \\ &= (-1.1) + 1.96 - \underline{(-0.1) \div 0.4} \\ &= \underline{(-1.1) + 1.96} - (-0.25) \\ &= \underline{0.86 - (-0.25)} \\ &= 1.11 \end{aligned}$$

$$\begin{aligned} & (-5.4) - (1.4)^2 + (0.2)^2 \div \left(\underline{(-1.6) \times (-2.5)} \right) \\ &= (-5.4) - \underline{(1.4)^2} + (0.2)^2 \div 4 \\ &= (-5.4) - 1.96 + \underline{(0.2)^2} \div 4 \\ &= (-5.4) - 1.96 + \underline{0.04 \div 4} \\ &= \underline{(-5.4) - 1.96} + 0.01 \\ &= \underline{(-7.36) + 0.01} \\ &= -7.35 \end{aligned}$$

Order of Operations with Decimals (J)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(4.3 \div (-2.5) + 2.1) \times (1.5 - (-6.4) + (-4.9))^2$$

$$(-0.2)^2 \div ((9.3 + (-5.1) - 7.9) \times 1.4 + 5.1)$$

$$(-0.5)^2 \times (((-4.3) + (-3.7)) \div (1.9 - 2.9))^2$$

Order of Operations with Decimals (J) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & (\underline{4.3 \div (-2.5)} + 2.1) \times (1.5 - (-6.4) + (-4.9))^2 \\ & = (\underline{(-1.72) + 2.1}) \times (1.5 - (-6.4) + (-4.9))^2 \\ & = 0.38 \times (\underline{1.5 - (-6.4)} + (-4.9))^2 \\ & = 0.38 \times (\underline{7.9 + (-4.9)})^2 \\ & = 0.38 \times \underline{3^2} \\ & = \underline{0.38 \times 9} \\ & = 3.42 \end{aligned}$$

$$\begin{aligned} & (-0.2)^2 \div ((\underline{9.3 + (-5.1)} - 7.9) \times 1.4 + 5.1) \\ & = (-0.2)^2 \div ((\underline{4.2 - 7.9}) \times 1.4 + 5.1) \\ & = (-0.2)^2 \div (\underline{(-3.7) \times 1.4} + 5.1) \\ & = (-0.2)^2 \div (\underline{(-5.18) + 5.1}) \\ & = \underline{(-0.2)^2} \div (-0.08) \\ & = \underline{0.04 \div (-0.08)} \\ & = -0.5 \end{aligned}$$

$$\begin{aligned} & (-0.5)^2 \times ((\underline{(-4.3) + (-3.7)}) \div (1.9 - 2.9))^2 \\ & = (-0.5)^2 \times ((-8) \div \underline{1.9 - 2.9})^2 \\ & = (-0.5)^2 \times (\underline{(-8) \div (-1)})^2 \\ & = \underline{(-0.5)^2} \times 8^2 \\ & = 0.25 \times \underline{8^2} \\ & = \underline{0.25 \times 64} \\ & = 16 \end{aligned}$$