

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.

$$\begin{aligned} & 0,7 + (-8,8) \div 2,2 \times \left(\underline{(-8,7)^2} - (8,7)^2 \right) \\ & = 0,7 + (-8,8) \div 2,2 \times \left(75,69 - \underline{(8,7)^2} \right) \\ & = 0,7 + (-8,8) \div 2,2 \times \left(\underline{75,69 - 75,69} \right) \\ & = 0,7 + \underline{(-8,8) \div 2,2} \times 0 \\ & = 0,7 + \underline{(-4) \times 0} \\ & = \underline{0,7 + 0} \\ & = 0,7 \end{aligned}$$

$$\begin{aligned} & (9,9 - \underline{1,8 \times 5,5})^3 \div 1,6 + (-4,4) + 7,4 \\ & = \left(\underline{9,9 - 9,9} \right)^3 \div 1,6 + (-4,4) + 7,4 \\ & = \underline{0^3} \div 1,6 + (-4,4) + 7,4 \\ & = \underline{0 \div 1,6} + (-4,4) + 7,4 \\ & = \underline{0 + (-4,4)} + 7,4 \\ & = \underline{(-4,4) + 7,4} \\ & = 3 \end{aligned}$$

$$\begin{aligned} & 5,7 - (-7,1)^2 + (-1,6)^2 \times \left(\underline{(-5,5) \div (-0,2)} \right) \\ & = 5,7 - \underline{(-7,1)^2} + (-1,6)^2 \times 27,5 \\ & = 5,7 - 50,41 + \underline{(-1,6)^2} \times 27,5 \\ & = 5,7 - 50,41 + \underline{2,56 \times 27,5} \\ & = \underline{5,7 - 50,41} + 70,4 \\ & = \underline{(-44,71) + 70,4} \\ & = 25,69 \end{aligned}$$

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.

$$\begin{aligned} & ((-8,9)^2 \times (\underline{8,3 - 4,4} + (-3,9)))^3 \div 7,2 \\ & = ((-8,9)^2 \times (\underline{3,9 + (-3,9)}))^3 \div 7,2 \\ & = (\underline{(-8,9)^2} \times 0)^3 \div 7,2 \\ & = (\underline{79,21} \times 0)^3 \div 7,2 \\ & = \underline{0^3} \div 7,2 \\ & = \underline{0 \div 7,2} \\ & = 0 \end{aligned}$$

$$\begin{aligned} & ((\underline{-8,6 + 7,4}) \times 6,8) \div (0,8)^2 - (7,2)^2 \\ & = (\underline{-1,2} \times 6,8) \div (0,8)^2 - (7,2)^2 \\ & = (-8,16) \div \underline{(0,8)^2} - (7,2)^2 \\ & = (-8,16) \div 0,64 - \underline{(7,2)^2} \\ & = \underline{-8,16 \div 0,64} - 51,84 \\ & = \underline{-12,75} - 51,84 \\ & = -64,59 \end{aligned}$$

$$\begin{aligned} & 8,3 + (2,5)^2 - (-8,9) \div (\underline{0,2 \times 2,5} \times (-0,5)) \\ & = 8,3 + (2,5)^2 - (-8,9) \div (\underline{0,5 \times (-0,5)}) \\ & = 8,3 + \underline{(2,5)^2} - (-8,9) \div (-0,25) \\ & = 8,3 + 6,25 - \underline{(-8,9) \div (-0,25)} \\ & = \underline{8,3 + 6,25} - 35,6 \\ & = \underline{14,55} - 35,6 \\ & = -21,05 \end{aligned}$$

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.

$$\begin{aligned} & (\underline{4,3 \div (-2,5)} + 2,1) \times (1,5 - (-6,4) + (-4,9))^2 \\ & = (\underline{(-1,72) + 2,1}) \times (1,5 - (-6,4) + (-4,9))^2 \\ & = 0,38 \times (\underline{1,5 - (-6,4)} + (-4,9))^2 \\ & = 0,38 \times (\underline{7,9 + (-4,9)})^2 \\ & = 0,38 \times \underline{3^2} \\ & = \underline{0,38 \times 9} \\ & = \underline{3,42} \end{aligned}$$

$$\begin{aligned} & (-0,2)^2 \div ((\underline{9,3 + (-5,1)} - 7,9) \times 1,4 + 5,1) \\ & = (-0,2)^2 \div ((\underline{4,2 - 7,9}) \times 1,4 + 5,1) \\ & = (-0,2)^2 \div (\underline{(-3,7) \times 1,4} + 5,1) \\ & = (-0,2)^2 \div (\underline{(-5,18) + 5,1}) \\ & = \underline{(-0,2)^2} \div (-0,08) \\ & = \underline{0,04 \div (-0,08)} \\ & = \underline{-0,5} \end{aligned}$$

$$\begin{aligned} & (-0,5)^2 \times ((\underline{(-4,3) + (-3,7)}) \div (1,9 - 2,9))^2 \\ & = (-0,5)^2 \times ((-8) \div (\underline{1,9 - 2,9}))^2 \\ & = (-0,5)^2 \times (\underline{(-8) \div (-1)})^2 \\ & = \underline{(-0,5)^2} \times 8^2 \\ & = 0,25 \times \underline{8^2} \\ & = \underline{0,25 \times 64} \\ & = \underline{16} \end{aligned}$$