

Solving One-Step Equations



Overview of problems



Example Set: A

Solve the equations-show all work

$$x + 1 = 7$$

$$y - 12 = 4$$

$$z - \frac{1}{2} = 3$$

$$t + 15 = -15$$

$$9 + n = 0$$

$$40 = x - (-8)$$

$$g + 2 = -10$$

$$12 + h = -\frac{1}{3}$$

$$x + 2.9 = 7.6$$

$$c - 1.3 = 12.5$$



Example Set: B

Solve the equations-show all work

$$2x = 14$$

$$-3x = 18$$

$$-4y = -20$$

$$-x = 3\frac{2}{3}$$

$$6x = 30$$

$$-10z = -100$$

$$8.1w = .02$$

$$-.002t = 1.039$$



Example Set: C

Solve the equations-show all work

$$\frac{1}{3}x = 2$$

$$\frac{2}{5}y = 3$$

$$\frac{9}{10}t = 1$$

$$-\frac{7}{11}w = \frac{1}{2}$$

$$-\frac{6x}{7} = 36$$

$$\frac{3t}{20} = -90$$

$$\frac{x}{4} = -5\frac{1}{2}$$

$$\frac{m}{-4} = -\frac{3}{4}$$



Example Set: D



In physics the formula for force is $F=ma$. Where F (force) is measured in Newtons, m (mass) in kg and a (acceleration) in meters/second-squared. How fast would a 500kg horse have to accelerate to create a force of 14000N?

Solving One-Step Equations



Overview of problems- KEY



Example Set: A

Solve the equations-show all work

$$x + 1 = 7 \quad x = 6$$

$$y - 12 = 4 \quad y = 16$$

$$z - \frac{1}{2} = 3 \quad z = 3\frac{1}{2}$$

$$t + 15 = -15 \quad t = -30$$

$$9 + n = 0 \quad n = -9$$

$$40 = x - (-8) \quad x = 32$$

$$g + 2 = -10 \quad g = -12$$

$$12 + h = -\frac{1}{3} \quad h = 12\frac{1}{3}$$

$$x + 2.9 = 7.6 \quad x = 4.7$$

$$c - 1.3 = 12.5 \quad c = 13.8$$



Example Set: B

Solve the equations-show all work

$$2x = 14$$

$$x = 7$$

$$-3x = 18$$

$$x = -6$$

$$-4y = -20$$

$$y = 5$$

$$-x = 3\frac{2}{3}$$

$$x = -3\frac{2}{3}$$

$$6x = 30$$

$$x = 5$$

$$-10z = -100$$

$$z = 10$$

$$8.1w = .02$$

$$w = .002469$$

$$-.002t = 1.039$$

$$t = -519.5$$



Example Set: C

Solve the equations-show all work

$$\frac{1}{3}x = 2 \quad x = 6$$

$$\frac{2}{5}y = 3 \quad y = \frac{15}{2}$$

$$\frac{9}{10}t = 1 \quad t = \frac{10}{9}$$

$$-\frac{7}{11}w = \frac{1}{2} \quad w = -\frac{11}{14}$$

$$-\frac{6x}{7} = 36 \quad x = -42$$

$$\frac{3t}{20} = -90 \quad t = -600$$

$$\frac{x}{4} = -5\frac{1}{2} \quad x = -22$$

$$\frac{m}{-4} = -\frac{3}{4} \quad m = 3$$



Example Set: D



In physics the formula for force is $F=ma$. Where F (force) is measured in Newtons, m (mass) in kg and a (acceleration) in meters/second-squared. How fast would a 500kg horse have to accelerate to create a force of 14000N?

$$28 \text{ m/s}^2$$