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

$x + 1 = 7$ $x = 6$

$y - 12 = 4$ $y = 16$

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

$t + 15 = -15$ $t = -30$

$9 + n = 0$ $n = -9$

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

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

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

$x + 2.9 = 7.6$ $x = 4.7$

$c - 1.3 = 12.5$ $c = 13.8$

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

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

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

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

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

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

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

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

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

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?

$28\ m/s^2$