Solving One-Step Equations 1.6

Overview of problems

Example Set: A

Solve the equations – show all work:

1. $x + 1 = 7$
2. $z - \frac{1}{2} = 3$
3. $9 + n = 0$
4. $g + 2 = -10$
5. $x + 2.9 = 7.6$
6. $y - 12 = 4$
7. $t + 15 = -15$
8. $40 = x - (-8)$
9. $12 + h = -\frac{1}{3}$
10. $c - 1.3 = 12.5$

Example Set: B

Solve the equations – show all work:

1. $2x = 14$
2. $-4y = -20$
3. $6x = 30$
4. $8.1w = .02$
5. $-3x = 18$
6. $-x = 3\frac{2}{3}$
7. $-10z = -100$
8. $-.002t = 1.039$

Solving One-Step Equations 1.6

Overview of problems

Example Set: C

Solve the equations – show all work:

1. $\frac{1}{3}x = 2$
2. $\frac{9}{10}t = 1$
3. $\frac{-6x}{7} = 36$
4. $\frac{x}{4} = -5\frac{1}{2}$
5. $\frac{2}{5}y = 3$
6. $-\frac{7}{11}w = \frac{1}{2}$
7. $\frac{3t}{20} = -90$
8. $\frac{m}{-4} = -\frac{3}{4}$

Example Set: D

1. 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 1.6

Overview of problems

*Example Set: A -**ANSWER KEY***

Solve the equations – show all work:

1. $x + 1 = 7$ $x = 6$
2. $z - \frac{1}{2} = 3$ $z = 3\frac{1}{2}$
3. $9 + n = 0$ $n = -9$
4. $g + 2 = -10$ $g = -12$
5. $x + 2.9 = 7.6$ $x = 4.7$
6. $y - 12 = 4$ $y = 16$
7. $t + 15 = -15$ $t = -30$
8. $40 = x - (-8)$ $x = 32$
9. $12 + h = -\frac{1}{3}$ $h = -12\frac{1}{3}$
10. $c - 1.3 = 12.5$ $c = 13.8$

*Example Set: B- **ANSWER KEY***

Solve the equations – show all work:

1. $2x = 14$ $x = 7$
2. $-4y = -20$ $y = 5$
3. $6x = 30$ $x = 5$
4. $8.1w = .02$ $w = .002469$
5. $-3x = 18$ $x = -6$
6. $-x = 3\frac{2}{3}$ $x = -3\frac{2}{3}$
7. $-10z = -100$ $z = 10$
8. $-.002t = 1.039$ $t = -519.5$

Solving One-Step Equations 1.6

Overview of problems

*Example Set: C-**ANSWER KEY***

Solve the equations – show all work:

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

2. $\frac{9}{10}t = 1$ $t = 10/9$

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

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

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

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

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

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

*Example Set: D-**ANSWER KEY***

1. 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?

$28\ m/s^2$