

## HW 4-3

## Int 1

## Solving Two-Step Equations

## Unit 4

**Instructions:** For each of the following equations, you must do these 3 steps to get full credit.

- 1) Circle the variable and set up your lines.
- 2) Use Inverse Operations on BOTH SIDES.
- 3) Solve with the variable in your answer.

\*Remember that you can plug in your answer to the original question to check your answer!\*

1)  $3x + 1 = 10$

$$\begin{array}{r|l} \cancel{+1} & \cancel{-1} \\ \hline 3x & = 9 \\ \hline \frac{3x}{3} & \frac{9}{3} \\ \hline x & = 3 \end{array}$$

5)  $-4w - 4 = 8$

$$\begin{array}{r|l} \cancel{-4} & \cancel{+4} \\ \hline -4w & = 12 \\ \hline \frac{-4w}{-4} & \frac{12}{-4} \\ \hline w & = -3 \end{array}$$

2)  $-3 + 8n = -5$

6)  $5 + \frac{1}{7}b = 2$

3)  $4h + (-6) = 22$

$$\begin{array}{r|l} \cancel{+(-6)} & \cancel{+6} \\ \hline 4h & = 28 \\ \hline \frac{4h}{4} & \frac{28}{4} \\ \hline h & = 7 \end{array}$$

7)  $2r - 3.1 = 1.7$

$$\begin{array}{r|l} \cancel{-3.1} & \cancel{+3.1} \\ \hline 2r & = 4.8 \\ \hline \frac{2r}{2} & \frac{4.8}{2} \\ \hline r & = 2.4 \end{array}$$

4)  $-8s - (-1) = 33$

8)  $4t + 3.5 = 12.5$

9)  $8m - 5.5 = 10.1$

$$m = 1.95$$

10)  $9.3 - 2x = 21.9$

13)  $\frac{1}{2} + \frac{2}{3}x = \frac{2}{5}$

$$x = -\frac{3}{20}$$

14)  $\frac{3}{4}r - \frac{4}{3} = \frac{1}{6}$

11)  $25 + \frac{11}{12}b = 47$

$$b = 24$$

15)  $6m - 1 = 25$

$$m = \frac{13}{3} \text{ or } 4\frac{1}{3} \text{ or } 4.\bar{3}$$

12)  $15 - \frac{1}{2}n = -3$

16)  $5 + 4w = 69$

17)  $-7t + 3 = -52$

$t = \frac{55}{7}$  or  $7\frac{6}{7}$   
7.857

21)  $43 = 9t + (-2)$

$t = 5$

18)  $9b - (-1) = 28$

22)  $66 = 20y - 16$

19)  $-5m - 10 = 25$

$m = -7$

23)  $85 = 3w + 4$

$w = 27$

20)  $46 - 3v = 58$

24)  $3.5c - 2 = 8.5$

$$25) \quad 3b - 2 = 4$$

$$b = 2$$

$$27) \quad 45 - 5t = 25$$

$$t = 4$$

$$26) \quad 10 = -3t - 5$$

$$t = -5$$

$$t = -5$$