

Algebra 0507
Chapter 3
Intro to WS #10

Name _____

Solve. Show all work. Hint: Get variables on one side of = sign and #'s on other.

1. $5x = 3x + 12$ $\begin{array}{r} 5x = 3x + 12 \\ -2x \quad -2x \\ \hline 3x = 12 \\ \frac{3x}{3} = \frac{12}{3} \\ x = 4 \end{array}$	2. $4y + 12 = 7y$ $\begin{array}{r} 4y + 12 = 7y \\ -4y \quad -4y \\ \hline 12 = 3y \\ \frac{12}{3} = \frac{3y}{3} \\ 4 = y \end{array}$
3. $7x + 4 = 9x + 24 - 2x$ $\begin{array}{r} 7x + 4 = 9x + 24 - 2x \\ -7x \quad -7x \\ \hline 4 = 24 \end{array}$	4. $4a + 1 = 7a - 17$ $\begin{array}{r} 4a + 1 = 7a - 17 \\ -4a \quad -4a \\ \hline 1 = 3a - 17 \\ +17 \quad +17 \\ \hline 18 = 3a \\ \frac{18}{3} = \frac{3a}{3} \quad b = a \end{array}$
5. $y - 7 = 3\frac{1}{2} + 2y$ $\begin{array}{r} y - 7 = 3\frac{1}{2} + 2y \\ -y \quad -y \\ \hline -7 = 3\frac{1}{2} + y \\ -3\frac{1}{2} \quad -3\frac{1}{2} \end{array}$	6. $0.7a + 0.3a = 2a - 4$ $\begin{array}{r} 0.7a + 0.3a = 2a - 4 \\ a = 2a - 4 \\ -2a \quad -2a \\ \hline -a = -4 \\ \frac{-a}{-1} = \frac{-4}{-1} \\ a = 4 \end{array}$

$$\begin{array}{l} -7 - 3\frac{1}{2} = y \\ -\frac{14}{2} - \frac{7}{2} = y \\ -\frac{21}{2} = y \end{array}$$

7. $4(x+2) = 3x$	8. $-4(x+2) = -6x + 2$
9. $2x + 3(x-9) = 2(x+3)$	10. $2(2n+1) - 3(n-5) = 0$
11. $36 - 2(c-28) = -4(2c+52)$	12. $6 - (8-3n) = 2(2n+1)$