

## 3.5

## Practice (HW #12)

Pick 10 problems to do!

Solve the equation. Check your solution.

1.  $3k - 2 = 10$

$$\begin{array}{r|l} +2 & +2 \\ \hline 3k & = 12 \\ \frac{3k}{3} & = \frac{12}{3} \\ \hline k & = 4 \end{array}$$

Check:

$$\begin{aligned} 3(4) - 2 &= 10 \\ 12 - 2 &= 10 \\ 10 &= 10 \checkmark \end{aligned}$$

2.  $5p + 2 = -10$

$$\begin{array}{r|l} -2 & -2 \\ \hline 5p & = -12 \\ \frac{5p}{5} & = \frac{-12}{5} \\ \hline p & = -2.4 \end{array}$$

Check:

$$\begin{aligned} 5(2.4) + 2 &= -10 \\ -12 + 2 &= -10 \\ -10 &= -10 \checkmark \end{aligned}$$

3.  $-4x + 3 = -11$

$$\begin{array}{r|l} -3 & -3 \\ \hline -4x & = -14 \\ \frac{-4x}{-4} & = \frac{-14}{-4} \\ \hline x & = \frac{7}{2} \end{array}$$

Check:

$$\begin{aligned} -4\left(\frac{7}{2}\right) + 3 &= -11 \\ -14 + 3 &= -11 \\ -11 &= -11 \checkmark \end{aligned}$$

4.  $12 = 2d + 3.2$

$$\begin{array}{r|l} -3.2 & -3.2 \\ \hline 2d & = 8.8 \\ \frac{2d}{2} & = \frac{8.8}{2} \\ \hline d & = 4.4 \end{array}$$

Check:

$$\begin{aligned} 12 &= 2(4.4) + 3.2 \\ 12 &= 8.8 + 3.2 \\ 12 &= 12 \checkmark \end{aligned}$$

5.  $-1 - 5h = 14$

$$\begin{array}{r|l} +1 & +1 \\ \hline -5h & = 15 \\ \frac{-5h}{-5} & = \frac{15}{-5} \\ \hline h & = -3 \end{array}$$

Check:

$$\begin{aligned} -1 - 5(-3) &= 14 \\ -1 + 15 &= 14 \\ 14 &= 14 \checkmark \end{aligned}$$

6.  $1.25r - 7 = 2.5$

$$\begin{array}{r|l} +7 & +7 \\ \hline 1.25r & = 9.5 \\ \frac{1.25r}{1.25} & = \frac{9.5}{1.25} \\ \hline r & = 7.6 \end{array}$$

Check:

$$\begin{aligned} 1.25(7.6) - 7 &= 2.5 \\ 9.5 - 7 &= 2.5 \\ 2.5 &= 2.5 \checkmark \end{aligned}$$

7.  $-4k + 3.6 = 7.8$

$$\begin{array}{r|l} -3.6 & -3.6 \\ \hline -4k & = 4.2 \\ \frac{-4k}{-4} & = \frac{4.2}{-4} \\ \hline k & = -1.05 \end{array}$$

Check:

$$\begin{aligned} -4(-1.05) + 3.6 &= 7.8 \\ 4.2 + 3.6 &= 7.8 \\ 7.8 &= 7.8 \checkmark \end{aligned}$$

8.  $6 + 2n = 3$

$$\begin{array}{r|l} -6 & -6 \\ \hline 2n & = -3 \\ \frac{2n}{2} & = \frac{-3}{2} \\ \hline n & = -1.5 \end{array}$$

Check:

$$\begin{aligned} 6 + 2(-1.5) &= 3 \\ 6 + (-3) &= 3 \\ 3 &= 3 \checkmark \end{aligned}$$

9.  $4y - 16.3 = 53.1$

$$\begin{array}{r|l} +16.3 & +16.3 \\ \hline 4y & = 69.4 \\ \frac{4y}{4} & = \frac{69.4}{4} \\ \hline y & = 17.35 \end{array}$$

Check:

$$\begin{aligned} 4(17.35) - 16.3 &= 53.1 \\ 69.4 - 16.3 &= 53.1 \\ 53.1 &= 53.1 \checkmark \end{aligned}$$

10.  $5k - 8 = 7$

$$\begin{array}{r|l} +8 & +8 \\ \hline 5k & = 15 \\ \frac{5k}{5} & = \frac{15}{5} \\ \hline k & = 3 \end{array}$$

Check:

$$\begin{aligned} 5(3) - 8 &= 7 \\ 15 - 8 &= 7 \\ 7 &= 7 \checkmark \end{aligned}$$

$$11. \quad 6b + 9 = -15$$

$$\begin{array}{r|l} -9 & -9 \\ \hline 6b & -24 \\ \hline 6 & 6 \\ \hline b & -4 \end{array}$$

Check:

$$6(-4) + 9 = -15$$

$$-24 + 9 = -15$$

$$-15 = -15 \checkmark$$

$$12. \quad -3.2w - 2 = -4.5$$

$$\begin{array}{r|l} +2 & +2 \\ \hline -3.2w & -2.5 \\ \hline -3.2 & -3.2 \\ \hline w & 0.78125 \end{array}$$

Check:

$$-3.2(0.78125) - 2 = -4.5$$

$$-2.5 - 2 = -4.5$$

$$-4.5 = -4.5 \checkmark$$

$$13. \quad 13 - 2n = 27$$

$$\begin{array}{r|l} -13 & -13 \\ \hline -2n & 14 \\ \hline -2 & -2 \\ \hline n & -7 \end{array}$$

Check:

$$13 - 2(-7) = 27$$

$$13 + 14 = 27$$

$$27 = 27 \checkmark$$

$$14. \quad 25 = 4.5z + 12$$

$$\begin{array}{r|l} -12 & -12 \\ \hline 13 & 4.5z \\ \hline 4.5 & 4.5 \\ \hline 2.8 & z \end{array}$$

Check:

$$25 = 4.5(2.8) + 12$$

$$25 = 13 + 12$$

$$25 = 25 \checkmark$$

$$15. \quad 84 = 51 - 14p$$

$$\begin{array}{r|l} -51 & -51 \\ \hline 33 & -14p \\ \hline -14 & -14 \\ \hline -\frac{33}{14} & p \end{array}$$

Check:

$$84 = 51 - 14\left(-\frac{33}{14}\right)$$

$$84 = 51 + 33$$

$$84 = 84 \checkmark$$

$$16. \quad 81 + 7t = 81$$

$$\begin{array}{r|l} -81 & -81 \\ \hline 7t & 0 \\ \hline 7 & 7 \\ \hline t & 0 \end{array}$$

Check:

$$81 + 7(0) = 81$$

$$81 = 81 \checkmark$$

$$17. \quad 16 + 2.4c = 22.5$$

$$\begin{array}{r|l} -16 & -16 \\ \hline 2.4c & 6.5 \\ \hline 2.4 & 2.4 \\ \hline c & 2.7083 \end{array}$$

Check:

$$16 + 2.4(2.7083) = 22.5$$

$$16 + 6.5 = 22.5$$

$$22.5 = 22.5 \checkmark$$