

Is It Correct?

Score _____ Period _____

Circle the mistake. Explain the mistake. Then solve the equation correctly from the beginning.

1) $3(10 + k) = 84$

$$30 + k = 84$$

$$\begin{array}{r} -30 \quad -30 \\ 30 + k = 84 \\ \hline k = 54 \end{array}$$

$$k = 54$$

2) $\frac{-8+r}{4} = -4 + 8$

$$\frac{4}{1} \cdot \frac{r}{4} = 4 \cdot 4$$

$$r = 16$$

3) $-2 = -9 + \frac{p}{2}$

$$\begin{array}{r} +9 \quad +9 \\ 2(-7) = \frac{p}{2} \cdot 2 \\ \hline -14 = p \end{array}$$

$$-14 = p$$

4) $4 - 8x = 164$

$$\begin{array}{r} -4 \quad -4 \\ 4 - 8x = 164 \\ \hline -8x = 160 \end{array}$$

$$\frac{-8x}{8} = \frac{160}{8}$$

$$x = 20$$

5) $-6 = -4n + 3n$

$$\begin{array}{r} -6 = -n \\ \hline -1 \quad -1 \\ -6 = n \end{array}$$

$$-6 = n$$

6) $5p + p = 6$

$$-p - p$$

$$\frac{4p}{4} = \frac{6}{4}$$

$$p = \frac{6}{4}$$

$$p = \frac{3}{2}$$

$$7) 3x + 3 - 6 = 6$$

$$3x - 3 = 6$$
$$\begin{array}{r} -3 \quad -3 \end{array}$$

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

$$x = 1$$

$$8) -2k - 4k = 6$$

$$+4k + 4k$$
$$2k = 6$$
$$\frac{2k}{2} = \frac{6}{2}$$

$$k = 3$$

$$9) 2(4 - 4r) - r = -7r - 2$$

$$8 - 8r - r = -7r - 2$$

$$8 - 9r = -7r - 2$$
$$\begin{array}{r} +7r \quad +7r \end{array}$$

$$8 - 2r = -2$$
$$\begin{array}{r} -8 \quad \quad -8 \end{array}$$

$$\frac{2r}{2} = \frac{-10}{2}$$

$$r = -5$$

$$11) 6 + 6m = 3(3m - 5)$$

$$12m = 9m - 15$$
$$\begin{array}{r} -9m \quad -9m \end{array}$$

$$\frac{3m}{3} = \frac{-15}{3}$$

$$m = -5$$

$$10) 26 + 5n = 2n + 7(4n - 7)$$

$$26 + 5n = 2n + 28n - 7$$

$$26 + 5n = 30n - 7$$
$$\begin{array}{r} -5n \quad -5n \end{array}$$

$$26 = 25n - 7$$
$$\begin{array}{r} +7 \quad \quad +7 \end{array}$$

$$\frac{33}{25} = \frac{25n}{25}$$

$$\frac{33}{25} = n$$

$$12) 21 - 7x = -7(x + 4) + 7x$$

$$21 - 7x = -7x + 28 + 7x$$

$$21 - 7x = 28$$

$$\begin{array}{r} -21 \quad \quad -21 \end{array}$$

$$-7x = 7$$

$$\frac{-7x}{-7} = \frac{7}{-7}$$

$$x = -1$$