

Day 1 - Solving One and Two Step Equations

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Directions: Solve each equation, showing all work.

$$\begin{array}{r} 1. \quad m - 9 = -13 \\ \quad +9 \quad +9 \\ \hline m = -4 \end{array}$$

$$\begin{array}{r} 2. \quad 3 \cdot \frac{b}{3} = -6 \cdot 3 \\ \quad \quad \quad b = -18 \end{array}$$

$$\begin{array}{r} 3. \quad -15x = 0 \\ \quad -15 \quad -15 \\ \hline x = 0 \end{array}$$

$$\begin{array}{r} 4. \quad 4x + 7 = 31 \\ \quad -7 \quad -7 \\ \hline 4x = 24 \\ \quad \quad \quad \frac{4}{4} \quad \frac{24}{4} \\ \hline x = 6 \end{array}$$

$$\begin{array}{r} 5. \quad \frac{n}{5} - 4 = -2 \\ \quad \quad \quad +4 \quad +4 \\ \hline 5 \cdot \frac{n}{5} = 2 \cdot 5 \\ \quad \quad \quad n = 10 \end{array}$$

$$\begin{array}{r} 6. \quad \frac{y+4}{7} = -3 \cdot 7 \\ \quad \quad \quad y+4 = -21 \\ \quad \quad \quad -4 \quad -4 \\ \hline y = -25 \end{array}$$

$$\begin{array}{r} 7. \quad 7x + 18 = -24 \\ \quad -18 \quad -18 \\ \hline 7x = -42 \\ \quad \quad \quad \frac{7}{7} \quad \frac{-42}{7} \\ \hline x = -6 \end{array}$$

$$\begin{array}{r} 8. \quad \frac{5}{-5} - 2x = 15 \\ \quad -5 \quad -5 \\ \hline -2x = 10 \\ \quad \quad \quad \frac{-2}{-2} \quad \frac{10}{-2} \\ \hline x = -5 \end{array}$$

$$\begin{array}{r} 9. \quad \frac{-7x + (+3)}{3} = 15 \cdot 3 \\ \quad \quad \quad -7x + 3 = 45 \\ \quad \quad \quad -3 \quad -3 \\ \hline -7x = 42 \\ \quad \quad \quad \frac{-7}{-7} \quad \frac{42}{-7} \\ \hline x = -6 \end{array}$$

10. Describe and correct the error:

$$\begin{array}{l} \times \quad -3x + 2 = -7 \\ \quad \quad -3x = -9 \\ \quad \quad -\frac{3x}{3} = \frac{-9}{3} \leftarrow \text{mistake} \\ \quad \quad x = -3 \end{array}$$

you should have divided by -3, not 3.
The answer should be $x = 3$.