

Algebra I Worksheet #2 Unit 2 Selected Solutions

Complete the table for each input-output chart shown.

	13.	14.	15.	16.
Input	$x + 23 = 81$	$x - 45 = 12$	$7x = 350$	$\frac{x}{12} = 3$
↓ Operation	subtract 23 from both sides	add 45 to both sides	divide both sides by 7	multiply both sides by 12
↓ Output	$x = 58$	$x = 57$	$x = 50$	$x = 36$

Solve the following equations.

$$\begin{array}{r}
 21. \quad x + 51 = 96 \\
 \underline{-51 \quad -51} \\
 x = 45
 \end{array}$$

$$\begin{array}{r}
 22. \quad x - 37 = 23 \\
 \underline{+37 \quad +37} \\
 x = 60
 \end{array}$$

$$\begin{array}{r}
 23. \quad \frac{8x}{8} = \frac{104}{8} \\
 x = 13
 \end{array}$$

$$\begin{array}{r}
 24. \quad 8 \cdot \frac{x}{8} = 21 \cdot 8 \\
 x = 168
 \end{array}$$

Write an algebraic expression for each of the following.

31. A team lost x games. They won two more games than they lost. They won $x + 2$ games.

32. A team lost x games. They won twice as many games as they lost. They won $2x$ games.

33. A team played 12 games. They lost x games. They won $12 - x$ games.