

Algebra I Worksheet #3 Unit 2 Selected Solutions

Complete the table for each input-output chart shown.

	5.	6.	7.	8.
Input	$x + 45 = 68$	$x - 34 = 95$	$4x = 228$	$\frac{x}{8} = 24$
↓ Operation	subtract 45 from both sides	add 34 to both sides	divide both sides by 4	multiply both sides by 8
↓ Output	$x = 23$	$x = 129$	$x = 57$	$x = 192$

Solve the following equations.

$$17. \quad \begin{array}{r} x + 25 = 43 \\ -25 \quad -25 \\ \hline x = 18 \end{array}$$

$$18. \quad \begin{array}{r} x - 19 = 43 \\ +19 \quad +19 \\ \hline x = 62 \end{array}$$

$$19. \quad \begin{array}{r} 7x = 196 \\ \quad \quad 7 \\ \hline x = 28 \end{array}$$

$$20. \quad 9 \cdot \frac{x}{9} = 17 \cdot 9$$

$$x = 153$$

Write an algebraic expression for each of the following.

21. the distance driven at 50 miles per hour for k hours $50k$
distance = rate · time

26. Mary is five years younger than her brother Bill. If B represents Bill's age, then represent Mary's age in terms of B. $B - 5$

30. Sarah has twice as many marbles as Ted. John has 6 fewer marbles than Ted. If t represents the number of marbles Ted has, then represent each of the following in terms of t.

The number of marbles that Sarah has: $2t$

The number of marbles that John has: $t - 6$