

Algebra I Worksheet #2 Unit 4 selected solutions

Complete the table for each input-output chart shown to solve for x.

	6.	8.	22.	24.
Input	$4x + 6 = c$	$ax + b = c$	$6x - 3 = c$	$ax - b = c$
↓ First Operation	subtract 6 from both sides	subtract b from both sides	add 3 to both sides	add b to both sides
↓ Output	$4x = c - 6$	$ax = c - b$	$6x = c + 3$	$ax = c + b$
↓ Second Operation	divide both sides by 4	divide both sides by a	divide both sides by 6	divide both sides by a
↓ Output	$x = \frac{c - 6}{4}$	$x = \frac{c - b}{a}$	$x = \frac{c + 3}{6}$	$x = \frac{c + b}{a}$

Solve for x.

10. $5x + 15 = p$
 $5x = p - 15$
 $x = \frac{p - 15}{5}$

12. $nx + k = p$
 $nx = p - k$
 $x = \frac{p - k}{n}$

14. $2x + n = d$
 $2x = d - n$
 $x = \frac{d - n}{2}$

16. $px + c = 3$
 $px = 3 - c$
 $x = \frac{3 - c}{p}$

26. $4x - 10 = k$
 $4x = k + 10$
 $x = \frac{k + 10}{4}$

28. $ax - n = k$
 $ax = k + n$
 $x = \frac{k + n}{a}$

30. $3x - p = c$
 $3x = c + p$
 $x = \frac{c + p}{3}$

32. $px - b = 2$
 $px = b + 2$
 $x = \frac{b + 2}{p}$