

Algebra: Equations

Solve the following equations.

1. $2x - 1 = 11$

$x = \underline{\hspace{2cm}}$

2. $3y - 4 = 2$

$y = \underline{\hspace{2cm}}$

3. $5a - 3 = 17$

$a = \underline{\hspace{2cm}}$

4. $6y - 4 = 14$

$y = \underline{\hspace{2cm}}$

5. $4n - 5 = 15$

$n = \underline{\hspace{2cm}}$

6. $3x + 2 = 20$

$x = \underline{\hspace{2cm}}$

7. $5k + 9 = 49$

$k = \underline{\hspace{2cm}}$

8. $6p + 7 = 70$

$p = \underline{\hspace{2cm}}$

9. $8x - 3 = 93$

$x = \underline{\hspace{2cm}}$

10. $12d + 13 = 97$

$d = \underline{\hspace{2cm}}$

11. $\frac{n}{2} - 1 = 4$

$n = \underline{\hspace{2cm}}$

12. $\frac{r}{5} - 3 = 1$

$r = \underline{\hspace{2cm}}$

$$13. 2(x - 1) = 8$$

$$x = \underline{\hspace{2cm}}$$

$$14. 5(y - 3) = 10$$

$$y = \underline{\hspace{2cm}}$$

$$15. 2(3a + 1) = 14$$

$$a = \underline{\hspace{2cm}}$$

$$16. 4(2p + 3) = 20$$

$$p = \underline{\hspace{2cm}}$$

$$17. 5(2n - 3) = 25$$

$$n = \underline{\hspace{2cm}}$$

$$18. 8y - 19 = 2y + 4$$

$$y = \underline{\hspace{2cm}}$$

19. Marko had to buy his softball equipment. The shoes cost $\$y$, the bat cost $\$50$ more than the shoes and the gloves cost $\$73$ more than the shoes.

a. Write an algebraic term for the cost of the bat.

b. Write an algebraic term for the cost of the gloves.

c. Write down and simplify the expression for the cost of the shoes, the bat and the gloves.

d. Marko paid $\$216$ for his equipment. Calculate the cost of the shoes.
