

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. $12d + 13 = 97$

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

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 = _____

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

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

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

a = _____

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

p = _____

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

n = _____

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

y = _____

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.
