

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. $2(x - 1) = 8$

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

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.

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

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

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

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

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

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

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