

Practice with Evaluating and Solving Equations/Functions

SHOW YOUR WORK!

Rewrite each function using function notation.

1. $y = 2x + 7$

2. $s = 5t$

3. $y = ax^2 + bx + c$

4. $y = -2|x + 6|$

Evaluate each of the following expressions.

5. $x + 5$ when $x = -2$

6. $2p - 8$ when $p = 4$

7. $f(x) = 7x - 8$ when $x = 3$

8. $f(x) = x^2$ when $x = 5$

Solve each equation.

9. $r - 13 = 7$

10. $\frac{x}{3} + 4 = 6$

11. $4m - 13 = 51$

12. $-4v + 8 = 12$

13. $2y + 6 = -4y + 18$

14. $2(2c - 4) = -2(c + 10)$

Substitute $f(x)$ and solve for x .

15. $f(x) = 2x + 12$ when $f(x) = 60$

16. $f(x) = -5x$ when $f(x) = 120$

17. $f(x) = 3x + 25$ when $f(x) = 178$

18. $f(x) = x - 200$ when $f(x) = 175$

19. $f(x) = -4x + 52$ when $f(x) = 486$

20. $f(x) = 4x - 16$ when $f(x) = 2x + 12$

Solve each function for the given input value.

The function $P(t) = 9t$ represents the total amount of money (in dollars) that a Hoover High School student makes working at Zaxby's as a function of time (in hours).

21. $P(5)$

22. $P(6.5)$

The function $H(t) = -15t + 372$ represents the height of an elevator that starts at the observation deck of Vulcan and *descends* without stopping at a *constant rate* of 15 feet per second.

23. $H(4)$

24. $H(5.5)$

