

Name: _____



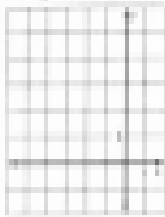
Review - Chapter 5

Evaluate the function for the given value of x .

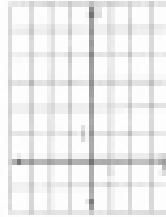
1. $f(x) = 25 - 2x$ when $x = 4$ 4. $f(x) = |x - 3|$ when $x = 2$
 2. $f(x) = x^2 + 5x + 1$ when $x = 1$

Graph the equation.

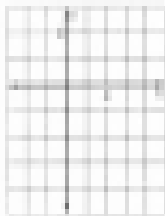
6. $y = |x + 1|$



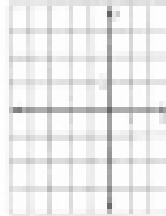
7. $y = 2$



8. $4x + y = 8$



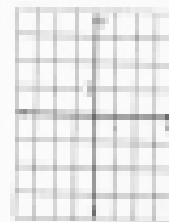
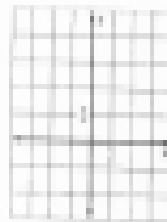
9. $x = -2$



19. **Car Wash** A local car wash charges \$6 per wash and \$10 per wash and wax. At the end of a certain day, the total sales were \$1,000. Write a model that shows the different numbers of the two types of car washes. Then find the number of washes and waxes there were if 200 more washes only.

Graph the function.

18. $f(x) = \begin{cases} 5, & \text{if } -2 \leq x < 2 \\ 2x, & \text{if } x < -2 \\ 3x, & \text{if } x \geq 2 \end{cases}$ 19. $f(x) = \begin{cases} x + 1, & \text{if } x \geq 0 \\ |x + 1|, & \text{if } x < 0 \end{cases}$

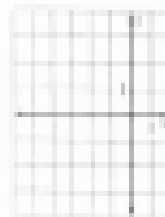


Write an equation of the line that has the given properties.

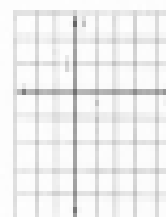
10. slope $\frac{1}{2}$ 11. slope 1 12. points
 x -intercept 2 point $(2, -5)$ $(3, 4), (-1, 8)$

Graph the inequality in a coordinate plane.

13. $x \leq -1$



14. $x \leq 2y + 1$



23. The graph of $x + 2y + 3 = 0$ contains which points?

- (A) $(0, 0)$ (B) $(2, -1)$
 (C) $(-2, -3)$ (D) $(-1, -3)$

24. The slope of a line in the form $y = mx + b$ is

- (A) x (B) m
 (C) b (D) a

25. The solution of $3x + 2 = 4 + 9$

- (A) $x = 4$ (B) $x = 2$
 (C) $x = 4$ (D) $x = 6$

26. The inequality $-2 < x < 4$

- (A) is unbounded (B) has no solution
 (C) includes 0 (D) includes 4

27. The points $(1, 2), (2, 3), (3, 4)$, and $(4, 5)$ lie on the line with equation

- (A) $-x + y = 1$ (B) $x + y = 1$
 (C) $x + y = 1$ (D) $x + y = -1$

28. Write an equation of the line that has a slope of $\frac{1}{2}$ and a y -intercept of -2 .

- (A) $y = -\frac{1}{2}x - 2$ (B) $y = \frac{1}{2}x + 2$
 (C) $y = \frac{1}{2}x - 2$ (D) $y = x - \frac{1}{2}x + 2$