

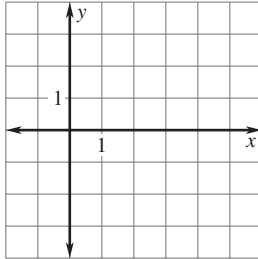
Chapter Test C

For use after Chapter 2

Graph the relation. Then tell whether the relation is a function.

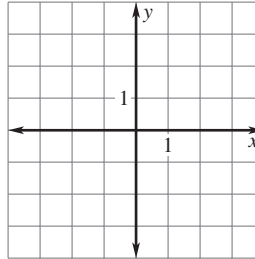
1.

x	1	2	3	4	5
y	2	2	2	2	2



2.

x	-3	-2	-1	0	1
y	3	-3	3	-3	3

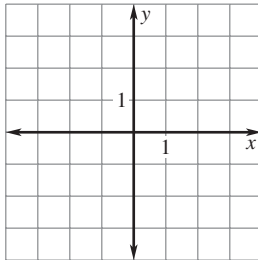


Evaluate the function for the given value of x.

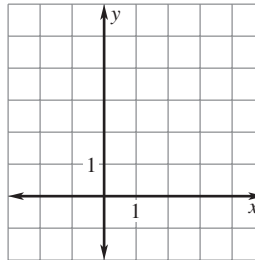
3. $f(x) = |x|$ when $x = -5$ 4. $f(x) = x^2 - x - 1$ when $x = 1$
 5. $f(x) = 2(x^2 - 4) + 1$ when $x = 0$

Graph the equation.

6. $y = 0$



7. $y = \frac{2}{3}x + 1$



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

8. slope: $\frac{3}{4}$, y-intercept: -2 9. slope: $-\frac{1}{2}$, point: $(-4, -3)$ 10. points: $(0, 5)$, $(-5, 0)$
 11. Write an equation of the line that passes through $(5, 5)$ and is parallel to the line $2x - 2y = -3$.
 12. Write an equation of the line that passes through $(-2, -4)$ and is perpendicular to the line $y = \frac{1}{2}x + 3$.

Answers

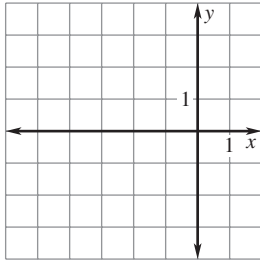
1. Use grid at left. _____
2. Use grid at left. _____
3. _____
4. _____
5. _____
6. Use grid at left. _____
7. Use grid at left. _____
8. _____
9. _____
10. _____
11. _____
12. _____

Chapter Test C

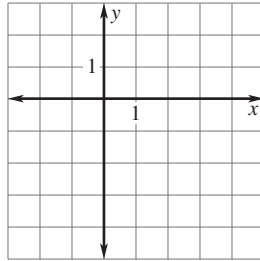
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Graph the inequality in a coordinate plane.

13. $x \geq -3$

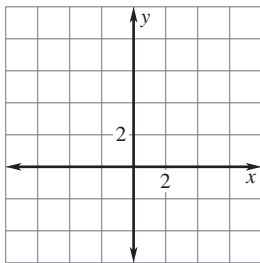


14. $x > 2y + 1$

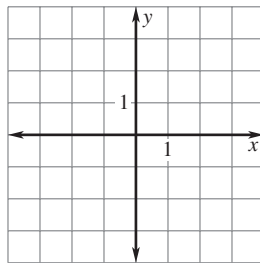


Graph the function.

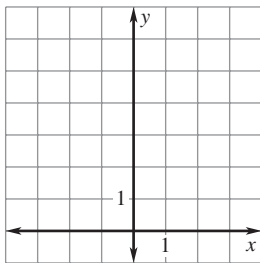
15. $f(x) = \begin{cases} x, & \text{if } -2 < x < 2 \\ 2x, & \text{if } x < -2 \\ 3x, & \text{if } x > 2 \end{cases}$



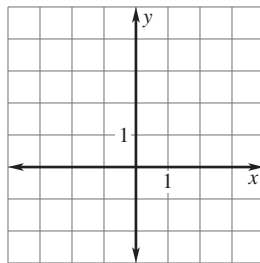
16. $f(x) = \begin{cases} \frac{1}{2}x - 2, & \text{if } x \geq 0 \\ \frac{3}{4}x + 3, & \text{if } x < 0 \end{cases}$



17. $f(x) = \frac{1}{2}|x| + 2$



18. $f(x) = \begin{cases} |x + 1|, & \text{if } x > 0 \\ |x - 1|, & \text{if } x < 0 \end{cases}$



19. **Car Wash** A local car wash charges \$8 per wash and \$10 per wash and wax. At the end of a certain day, the total sales were \$3100. Write a model that shows the different numbers of the two types of car washes. Then find the number of wash and waxes there were if 200 were washes only.

- 13. Use grid at left.
- 14. Use grid at left.
- 15. Use grid at left.
- 16. Use grid at left.
- 17. Use grid at left.
- 18. Use grid at left.
- 19. _____