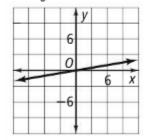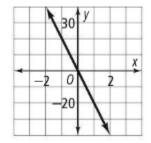**9.** yes; 3

10. $y = 10x$

11. 30 muffins

12. yes; $y = -\frac{1}{2}x$

13. always

14. never

15. always

17. $y = \frac{1}{6}x$

18. $y = -20x$

21. about 5 qt

23. Yes; as the number of ounces increases, the number of Calories increases. When the number of ounces is 0, the number of Calories is 0.

24. No; as the rate increases, the time decreases.

25. Yes; as the side length increases, the perimeter increases. When the side length is 0, the perimeter is 0.

26. No; as the number of items you purchase increases, the amount of money you have left decreases.

28. y does not vary directly with x because $y \neq 0$ when $x = 0$.

31. 12