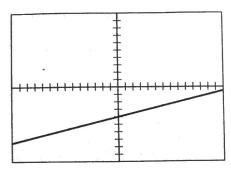
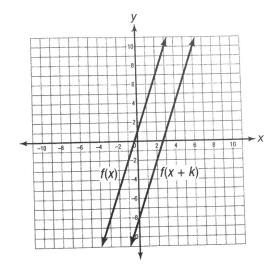
7. A calculator screenshot of the function $f(x) = \frac{1}{4}x - 4$ is graphed below.



What change would be seen if f(x) + 4 were graphed?

- **A.** The line shown on the calculator would shift to the right 4 units.
- **B.** The line shown on the calculator would shift to the left 4 units.
- C. The line shown on the calculator would shift up 4 units.
- **D.** The line shown on the calculator would shift down 4 units.
- 8. Didier will go camping for summer vacation. It costs \$5 to rent a tent, and the campsite costs \$3 per night. He uses the equation y = 3x + 5 to figure out how much money he will spend. What do x and y represent?
 - **A.** x represents the cost of renting a tent, and y is the total cost of the camping trip.
 - **B.** x represents the number of nights at the campsite, and y represents the cost of renting a tent.
 - **C.** x represents the number of nights at the campsite, and y is the total cost of the camping trip.
 - **D.** x is the total cost of the camping trip, and y represents the cost per night at the campsite.

9. In the graph below, the function f(x) = 3x + 1 has been transformed to the function f(x + k).



What is the value of k in the transformation f(x + k)?

A. -9

c. 3

B. -3

- **o.** 9
- 10. The Census Bureau tracked the population in the city of Weston over four years. The table below shows the populations measured during that time.

Year	Population
2006	36,000
2007	39,600
2008	43,560
2009	47,916

Does the population growth show linear growth, exponential growth, or neither?

- A. Since the population is increasing by the same percentage each year, the function is exponential.
- **B.** Since the population is increasing by the same percentage each year, the function is linear.
- **C.** Since the rate of increase is constant, the function is linear.
- **D.** Since the rate of increase is constant, the function is exponential.