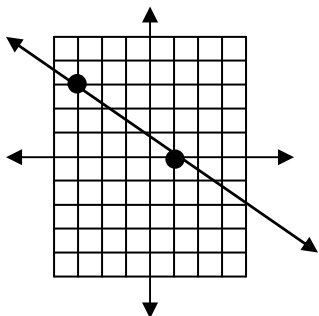


Study Guide Unit 6 Test

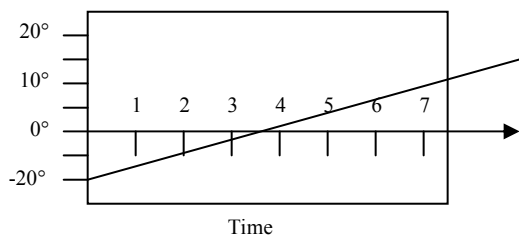
1. Give the slope of the line in the following graph.



- A. -3
B. $-\frac{4}{3}$
C. $-\frac{3}{4}$
D. 1
2. In the equation $y = \frac{4}{3}x + 2$, which number represents the slope of the line?

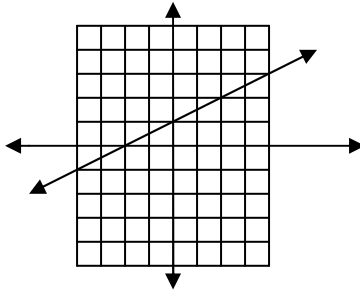
- A. x
B. y
C. $\frac{4}{3}$
D. 2

3. The following graph represents the temperature change during a winter storm. Give the slope of the line if the temperature at 3:30 a.m. was 0° .



- A. $-\frac{20}{3}$
B. $-\frac{3}{20}$
C. $\frac{40}{7}$
D. $\frac{7}{40}$

4. Which equation of the line for the following graph shows the correct slope?



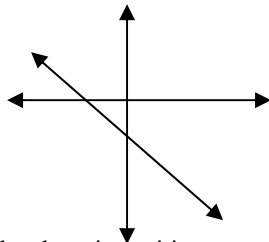
- A. $y = -\frac{1}{2}x + 1$
B. $y = -2x + 1$
C. $y = 2x + 1$
D. $y = \frac{1}{2}x + 1$
5. Find the slope of the line passing through $(-1, 4)$ and $(5, 2)$.
- A. -3
B. $-\frac{1}{3}$
C. $\frac{1}{3}$
D. 3
6. Give the slope of the line $3x - 5y = -10$.
- A. -5
B. $-\frac{3}{5}$
C. $\frac{3}{5}$
D. 5
7. Give the slope of $y = -3x - 7$.
- A. -7
B. $-3x$
C. -3
D. x

8. The number of computers sold at Central Electronics is shown in the following chart. What is the slope of the line that models the sells in terms of the year?

Computers Sold at Central Electronics

Year	Sells
1990	2,200
1995	2,500
2000	2,800
2005	3,100

- A. -60
B. $-\frac{1}{60}$
C. $\frac{1}{60}$
D. 60
9. Determine the slope of the line through $(-4, 7)$ and $(-2, 9)$.
- A. -1
B. $-\frac{1}{3}$
C. 1
D. 3
10. Describe the slope of the following line.



- A. The slope is positive.
B. The slope is negative.
C. The slope is zero.
D. The line has no slope.
11. Give the slope of the line $x = -3$.
- A. -3
B. 0
C. 1
D. No slope

12. Give the slope of $y + 8 = 7 - \frac{2}{3}x$.

- A. $-\frac{2}{3}$
- B. $-\frac{2}{3}x$
- C. $\frac{2}{3}$
- D. 7

13. Give the slope of the following line.

$$y - 4 = -5(x + 2)$$

- A. -5
- B. $-\frac{1}{5}$
- C. $\frac{1}{5}$
- D. 5

14. A line through $(-2, 5)$ and $(x, -6)$ has a slope of $-\frac{11}{6}$. Give the value of x .

- A. 4
- B. 8
- C. $\frac{109}{6}$
- D. $\frac{133}{6}$

15. A line contains points $(-3, -2)$ and $(5, -4)$. Determine the value of x for the ordered pair $(x, 8)$, if all of these points are on the same line.

- A. -53
- B. -43
- C. 8
- D. 16

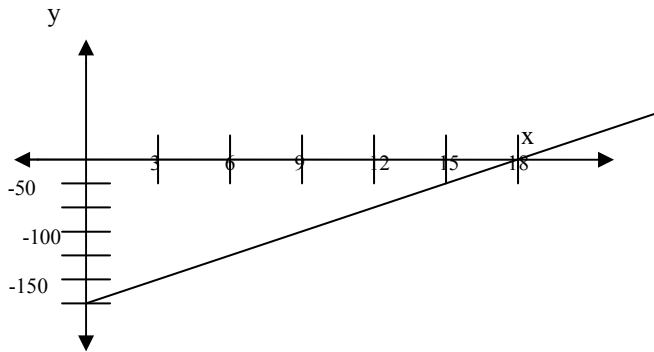
16. What is the slope of the line through $(0, -7)$ and the origin?

- A. -7
- B. $-\frac{1}{7}$
- C. 0
- D. No slope

17. A line contains the points $(5, -2)$ and $(-20, -12)$. Which of the following points is on the same line?

- A. $(-5, -4)$
- B. $(0, -8)$
- C. $(0, -4)$
- D. $(-10, -10)$

18. Tameka wants to buy a microwave oven and small refrigerator for her apartment at college. The two appliances cost a total of \$150. Tameka has a part-time job making \$25 every three weeks. Tameka's parents loaned her the money for the appliances, and Tameka agreed to repay them at the rate of \$25 every three weeks. The following graph illustrated this situation. What ordered pair on the coordinate graph will represent the amount of money Tameka will have after working 24 weeks and repaying her parents?



- A. $(18, 0)$
- B. $(25, 24)$
- C. $(24, 50)$
- D. $(50, 24)$

19. Green Grove High School had 928 students in 1995 and 1,198 students in 2005. If the school enrollment follows a linear growth pattern, find the slope of this linear function.

- A. -10
- B. -27
- C. 10
- D. 27

Study Guide Answer Key

1. C
2. C
3. C
4. D
5. B
6. C
7. C
8. D
9. C
10. B
11. D
12. A
13. A
14. A
15. B
16. D
17. C
18. C
19. D