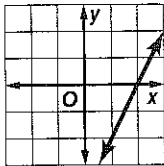


Write the letter for the correct answer in the blank at the right of each question.

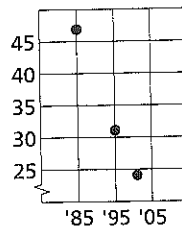
- What is the slope-intercept form of the equation of the line with a slope of $\frac{1}{4}$ and y -intercept at the origin?
 A $y = 4x$ B $y = \frac{1}{4}x$ C $y = x + \frac{1}{4}$ D $y + \frac{1}{4} = x$ 1. _____
 - Which equation is graphed at the right?
 F $y - 2x = -4$ H $2x + y = 4$
 G $2x + y = -4$ J $y - 4 = 2x$ 2. _____
- 
- Which is an equation of the line that passes through $(4, -5)$ and $(6, -9)$?
 A $y = \frac{1}{2}x - 3$ B $y = \frac{1}{2}x + 3$ C $y = -2x + 3$ D $y = 2x - 3$ 3. _____
 - What is the standard form of the equation of the line through $(6, -3)$ with a slope of $\frac{2}{3}$?
 F $-2x + 3y = 24$ G $2x - 3y = 21$ H $3x - 2y = 24$ J $3x - 2y = -21$ 4. _____
 - Which is an equation of the line with a slope of -3 that passes through $(2, 4)$?
 A $y - 4 = -3(x - 2)$ C $y + 4 = -3(x + 2)$
 B $y - 4 = -3x - 2$ D $y - 2 = -3(x - 4)$ 5. _____
 - What is the equation of the line through $(-2, -3)$ with an undefined slope?
 F $x = -2$ G $y = -3$ H $-2x - 3y = 0$ J $-3x + 2y = 0$ 6. _____
 - Find the slope-intercept form of the equation of the line that passes through $(-1, 5)$ and is parallel to $4x + 2y = 8$.
 A $y = -2x + 9$ B $y = 2x - 9$ C $y = 4x - 9$ D $y = -2x + 3$ 7. _____
 - If line q has a slope of -2 , what is the slope of any line perpendicular to q ?
 F 2 G -2 H $\frac{1}{2}$ J $-\frac{1}{2}$ 8. _____
 - The graph of data that has a strong negative correlation has
 A a narrow linear pattern from lower left to upper right.
 B a narrow linear pattern from upper left to lower right.
 C a narrow horizontal pattern below the x -axis.
 D all negative x -values. 9. _____
 - A scatter plot of data comparing the time in minutes Beverly spends studying for her math test and the score she received on the test contains the ordered pairs $(45, 89)$ and $(60, 94)$. Which is the slope-intercept form of an equation for the line of fit?
 F $0.573x + 63.2 = y$ G $\frac{1}{3}x + 74 = y$ 10. _____
 H $3x - 46 = y$ J $-\frac{1}{3}x + 104 = y$
 - Estimate how well Beverly would score on her next test if she spent 20 minutes studying.
 A 75 B 81 C 84 D 90 11. _____

4 Chapter 4 Test, Form 2B (continued)

For Questions 12-14, use the scatter plot shown.

12. Which data are shown by the scatter plot?

- F (1985, 47), (1995, 31), (2001, 24)
- G (1985, 50), (2000, 25), (2005, 0)
- H (47, 1985), (31, 1995), (24, 2001)
- J (1991, 45), (1995, 35), (2000, 8)



12. _____

13. Based on the data in the scatter plot, which statement is true?

- A As x increases, y increases.
- B As x increases, y decreases.
- C There is no relationship between x and y .
- D There are not enough data to determine the relationship between x and y .

13. _____

14. Based on the scatter plot, what would you expect the y -value to be for $x = 1992$?

- F between 40 and 45
- G higher than 45
- H between 30 and 40
- J impossible to tell

14. _____

15. A baby blue whale weighed 3 tons at birth. Ten days later, it weighed 4 tons. Assuming the same rate of growth, which equation shows the weight w when the whale is d days old?

- A $w = 10d + 3$
- B $w = 10d + 4$
- C $w = 0.1d + 3$
- D $w = d + 10$

15. _____

For Questions 16 and 17, use the table shown.

Times at Bat	4	5	8	12	22
Hits	1	0	2	4	6

16. Find the correlation coefficient of the best-fit line.

- F -0.631
- G 0.317
- H 0.920
- J 0.959

16. _____

17. Estimate how many hits a batter would get with 72 times at bat using the best-fit line.

- A 18
- B 19.6
- C 20
- D 22

17. _____

18. If $f(x) = \lfloor x - 2 \rfloor$, find $f(4.5)$.

- F 2
- G 2.5
- H 3
- J 6.5

18. _____

19. Which is not true about the graph of $f(x) = |2x - 1|$?

- A The domain includes all real numbers.
- B It includes the point $(-2, 5)$.
- C The range includes all real numbers.
- D The graph is "V-shaped."

19. _____

20. Which point is *not* located on the graph of $f(x) = \begin{cases} 2x + 3 & \text{if } x \leq -1 \\ 4 + x & \text{if } x > -1 \end{cases}$?

- F $(-1.5, 0)$
- G $(-1, 3)$
- H $(0, 4)$
- J $(4, 8)$

20. _____

Bonus For what value of k does $kx + 7y = 10$ have a slope of 3? **B:** _____