



### 3 Chapter 3 Test, Form 2A *(continued)*

Determine the slope of the line that contains the given points.

11.  $P(-6, 3), Q(12, 9)$   
 A  $-3$                       B  $-\frac{1}{3}$                       C  $\frac{1}{3}$                       D  $3$                       11.   C  

12.  $M(-8, 14), N(2, -11)$   
 F  $-\frac{5}{2}$                       G  $-\frac{2}{5}$                       H  $\frac{2}{5}$                       J  $\frac{5}{2}$                       12.   F  

13. Given  $A(-1, 4), B(1, 5)$ , and  $C(-5, 3)$ , which coordinate will make  $\overline{AB}$  parallel to  $\overline{CD}$ ?  
 A  $D(-7, 4)$               B  $D(-6, 1)$               C  $D(-4, 5)$               D  $D(-3, 4)$               13.   D  

14. Given  $A(2, 3), B(8, 7)$ , and  $C(6, 1)$ , which coordinate will make  $\overline{AB}$  perpendicular to  $\overline{CD}$ ?  
 F  $D(3, 3)$               G  $D(4, 4)$               H  $D(8, 4)$               J  $D(9, 3)$               14.   G  

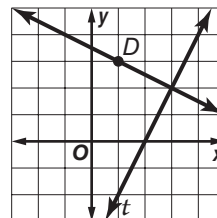
15. Which is an equation of the line with slope  $\frac{1}{2}$  that contains  $(-4, 7)$ ?  
 A  $y - 7 = \frac{1}{2}(x + 4)$               C  $y - 7 = -4x + \frac{1}{2}$   
 B  $y - 7 = \frac{1}{2}(x - 4)$               D  $y + 7 = \frac{1}{2}(x + 4)$               15.   A  

16. Which is an equation of the line with  $x$ -intercept 2 and  $y$ -intercept 12?  
 F  $y = -6x + 12$     G  $y = 2x + 12$     H  $y = 6x + 12$     J  $y = 12x + 2$     16.   F  

17. Which is an equation of the line containing  $(1, -3)$  and  $(7, 15)$ ?  
 A  $y = -3x + 8$     B  $y = 3x$               C  $y = 3x - 6$               D  $y = 3x - 10$     17.   C  

18. Mr. Perugia gives 4 points per question for  $q$  questions on English quizzes plus 5 points for a bonus question. Which equation represents the total score,  $T$ , a student can receive on a quiz?  
 F  $T + 5 = 4q$               G  $T = 4q + 5$               H  $T = 4(q + 5)$               J  $4T = q + 5$               18.   G  

19. What is the distance from  $D$  to  $t$ , shown in the figure?  
 A 2  
 B 3  
 C 5  
 D  $\sqrt{5}$



19.   D  

20. What is the distance between parallel lines whose equations are  $y = 2x + 7$  and  $y = 2x - 3$ ?  
 F  $\sqrt{2}$                       G  $\sqrt{5}$                       H  $2\sqrt{5}$                       J  $4\sqrt{2}$                       20.   H  

**Bonus** Suppose Ian reads at the rate of 15 pages an hour. Write an equation to represent the number of pages,  $y$ , Ian will still need to read after reading  $x$  hours of a 285-page novel. How long will it take Ian to read the entire novel?

**Sample answer:**  
 $y = 285 - 15x;$   
**B:**   19 h