SCORE ____

3 Write the letter for the correct answer in the blank at the right of each question. For Questions 1 and 2, refer to the figure at the right. **1.** Identify the plane parallel to plane *PQT*. V **A** plane PQS **C** plane *RSV* С **B** plane *PTS* **D** plane *TUW* 1. **2.** Which segment is ske.3w to \overline{RV} ? H \overline{SW} $\mathbf{J} \ \overline{SP}$ 2 $\mathbf{F} \ \overline{RS}$ **G** \overline{RQ} For Questions 3-10, refer to the figure at the right. Identify the special name for each angle pair. **3.** $\angle 3$ and $\angle 10$ **A** alternate exterior **C** consecutive interior $\frac{s}{2}$ С 3. **B** alternate interior **D** corresponding **4.** $\angle 9$ and $\angle 13$ \mathbf{F} alternate exterior **H** consecutive interior J **G** alternate interior **J** corresponding **5.** Given $p \parallel q$ and $m \angle 3 = 75$, find $m \angle 5$. В **D** 120 **A** 15 **B** 75 **C** 105 5. **6.** Given $p \parallel q$, $m \ge 10 = 3x - 7$, and $m \ge 13 = 4x - 9$, find the value of x. J **F** -2**G** 2 **J** 28 6. **H** 16 **7.** Given $\angle 1 \cong \angle 5$, which postulate or theorem justifies that $p \parallel q$? **A** Corresponding Angles Postulate **B** Consecutive Interior Angles Theorem **C** Alternate Exterior Angles Theorem 7. A **D** Alternate Interior Angles Theorem **8.** Given $\angle 12 \cong \angle 14$, which postulate or theorem justifies that $p \parallel q$? **F** Corresponding Angles Postulate **G** Consecutive Interior Angles Theorem **H** Alternate Exterior Angles Theorem Н J Alternate Interior Angles Theorem 8. **9.** If $p \parallel q$ by the Consecutive Interior Angles Theorem, which angle pair must be supplementary? В **A** $\angle 3$ and $\angle 10$ **B** $\angle 3$ and $\angle 8$ **C** $\angle 8$ and $\angle 13$ **D** $\angle 15$ and $\angle 16$ 9. **10.** If $m \angle 4 = 7x - 20$ and $m \angle 8 = 5x + 18$, find the value of x so that $p \parallel q$. **F** 219 **G** -1 10. **H** 1 **J** 19

Glencoe Geometry

Chapter 3 Test, Form 2A

NAME

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	В	$-\frac{1}{3}$	С	$\frac{1}{3}$	D	3	11	С
12.	M(-8, 14), N(2, -1) $\mathbf{F} -\frac{5}{2}$	L1) G	$-\frac{2}{5}$	н	$\frac{2}{5}$	J	$\frac{5}{2}$	12	F
13.	Given $A(-1, 4)$, $B($ parallel to \overline{CD} ?	1, 5) B), and $C(-5, 3)$, w	vhic	ch coordinate wil	l ma	ke \overline{AB}	19	D
14.	A $D(-7, 4)$ Given $A(2, 3), B(8, -7)$	\mathbf{D}	D(-6, 1) and $C(6, 1)$, which	ch c	oordinate will ma	D ake 2	\overline{AB}	10, _	
	F $D(3, 3)$	G G	<i>D</i> (4, 4)	н	<i>D</i> (8, 4)	J	<i>D</i> (9, 3)	14. _	G
15.	Which is an equati A $y - 7 = \frac{1}{2}(x + 4)$	ion c 4)	of the line with s	lope C	$e \frac{1}{2}$ that contains y - 7 = -4x + -4x	(-4)	4, 7)?		
	B $y - 7 = \frac{1}{2}(x - 4)$	4)		D	$y + 7 = \frac{1}{2}(x + 4)$	1)		15. <u>-</u>	Α
16.	16. Which is an equation of the line with <i>x</i> -intercept 2 and <i>y</i> -intercept 12?								
	$\mathbf{F} \ y = -6x + 12$	G	y = 2x + 12	Η	y = 6x + 12	J	y = 12x + 2	16	F
17.	17. Which is an equation of the line containing $(1, -3)$ and $(7, 15)$?								
	$\mathbf{A} \ y = -3x + 8$	B	y = 3x	С	y = 3x - 6	D	y = 3x - 10	17	С
18	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?								
	$\mathbf{F} \ T+5=4q$	G	T = 4q + 5	н	T = 4(q + 5)	J	4T = q + 5	18. <u>-</u>	G
19.	What is the distan A 2 B 3 C 5 D $\sqrt{5}$	ce fi	rom <i>D</i> to <i>t</i> , show	n ir	n the figure?			19	D
20. What is the distance between parallel lines whose equations are $y = 2x + 7$ and $y = 2x - 3$?									
	\mathbf{F} $\sqrt{2}$	G	$\sqrt{5}$	н	$2\sqrt{5}$	J	$4\sqrt{2}$	20	Н
Bonus Suppose Ian reads at the rate of 15 pages an hour. Write Sample answer:									

suppose fan reads at the rate of 15 pages an nour. 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? B: _ Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

y = 285 - 15x;

19 h