

Cumulative Review*CP Geometry*

Chapters 1–6

Multiple Choice1. Which line is perpendicular to $y = \frac{1}{3}x + 9$?

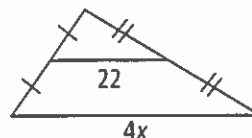
- (A) $4y = 12x - 7$ (B) $3y = -6x + 11$ (C) $3y = -9x + 1$ (D) $6y = 2x - 1$

2. Which side lengths would not make a triangle?

- (F) 4, 3, 7 (G) 3, 8, 6 (H) 2, 4, 5 (I) 4, 6, 9

3. What is the value of x in the figure at the right?

- (A) 5.5 (C) 22
(B) 11 (D) 44



4. A circular copper decoration has a diameter of 2 in. How much more area would a circular decoration with a diameter of 6 in. have?

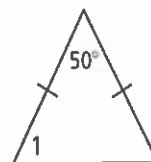
- (F) $8\pi \text{ in.}^2$ (G) $10\pi \text{ in.}^2$ (H) $32\pi \text{ in.}^2$ (I) $40\pi \text{ in.}^2$

5. What is the inverse of the statement, "If the sky is blue, then it is not raining"?

- (A) If the sky is not blue, then it is raining.
(B) If it is not raining, then the sky is blue.
(C) If it is raining, then the sky is not blue.
(D) If the sky is blue, then it is raining.

6. What is $m\angle 1$ in the triangle at the right?

- (F) 50 (H) 60
(G) 55 (I) 65



7. Which conditions are sufficient to prove a quadrilateral is a square?

- I. All four sides are congruent.
II. The diagonals are congruent.
III. The diagonals bisect each other.

- (A) I only (B) I and II (C) I and III (D) II and III

8. An isosceles triangle has two angles measuring 55° and 70° . What is the measure of the third angle?

- (F) 15 (G) 55 (H) 70 (I) 110

Cumulative Review (continued) CP Geometry

Chapters 1-6

Short Response

For Exercises 9-15, explain how you got your answer.

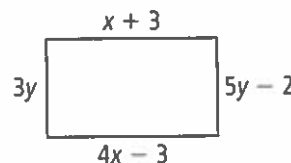
9. What is the length of \overline{MN} if $LN = 42$?



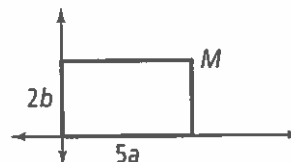
10. What is the midpoint of a segment with endpoints at $(-4, 3)$ and $(2, 5)$?

11. What is the slope of a line that passes through at $(-1, 5)$ and $(4, 5)$?

12. What are the values of x and y for which quadrilateral $ABCD$ is a parallelogram? Explain.



13. What are the coordinates of point M ?



14. What is the measure of an interior angle of a regular octagon? Explain.

15. What condition is necessary to assure that rhombus $LMNO$ is a square?

Extended Response

16. Sketch and label rhombus $ABCD$ and draw diagonal \overline{AC} .
Write a plan for proving $\triangle ABC \cong \triangle CDA$.