Accelerated Geometry Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 1 Quiz Review Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Distance, Midpoint & Slope**

**Find the distance between each pair of points in questions 1 & 2.**

1. (10, -3) (3, 2) 2. (-12, 3) (-3, 15)

**Find the length of  and  and determine if the segments are congruent or not congruent, in questions 3 and 4.**

3. A (-3, 6) B (3, 2) C (3, 6) D (-3, -4) AB = \_\_\_\_\_\_\_\_\_\_\_

CD = \_\_\_\_\_\_\_\_\_\_\_\_

Congruent?\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. A (0, 0) B (3, 0) C (0, -3) D (3, -3) AB = \_\_\_\_\_\_\_\_\_\_\_

CD = \_\_\_\_\_\_\_\_\_\_\_\_

Congruent?\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Find the midpoint between the two points in questions 5 & 6. Use the midpoint formula. Be sure to answer as an ordered pair in simplest terms.**

5. (-5, -3) (25, 13) \_\_\_\_\_\_\_\_\_\_\_\_\_ 6. (35, -2) (31, 18) \_\_\_\_\_\_\_\_\_\_\_\_\_

**Find x and y in questions 7 and 8. A and B are endpoints and T is the midpoint. Use the midpoint formula.**

7. A (24, y) T (-13, 8) B (x, -16) 8. A (x, y) T (-3, 9) B (5, -16)

**Find the slope between each pair of points in questions 9 & 10.**

9. (-13, 5) (12, -6) \_\_\_\_\_\_\_\_\_\_\_\_ 10. (19, -14) (-5, -2) \_\_\_\_\_\_\_\_\_\_\_\_

**Find the slope of  and  and determine if the segments are parallel, perpendicular or neither, in questions 11 to 13.**

11. A (-3, -1) B (-4, 2) C (5, 5) D (6, 2) Slope of \_\_\_\_\_\_\_

Slope of \_\_\_\_\_\_\_

Segments are \_\_\_\_\_\_\_

12. A (8, 12) B (5, 4) C (1, 5) D (9, 2) Slope of \_\_\_\_\_\_\_

Slope of \_\_\_\_\_\_\_

Segments are \_\_\_\_\_\_\_

13. A (4, 1) B (6, 4) C (12, 1) D (10, -3) Slope of \_\_\_\_\_\_\_

Slope of \_\_\_\_\_\_\_

Segments are \_\_\_\_\_\_\_

**Perimeters & Areas**

14. Find the perimeter and area of the triangle whose vertices are (-9, 8), (-9, 16), and (-17, 8)

15. Find the perimeter and area of the square whose vertices are (4, 7), (1, 7), (1, 3), and (4, 3)

16. Find the perimeter and area of the quadrilateral whose vertices are (-3, -10), (-5, -1), (2, -1), and (-1, 3)

17. The perimeter of the following figure is 40 ft. Find the value of x.

x

x + 8

5

x + 3

18. The area of the following figure is 60 ft2. Find the value of x.

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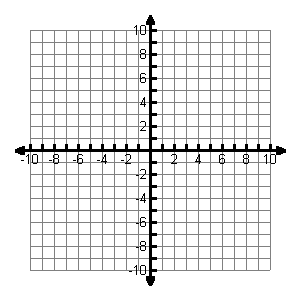
**Coordinate Proofs**

**In question 19, determine if triangle ABC is scalene, isosceles or equilateral.**

19. A (4,4) B (6, 2) C (-2, -4) \_\_\_\_\_\_\_\_\_\_\_\_

**In question 20, determine if triangle ABC is a right triangle.**

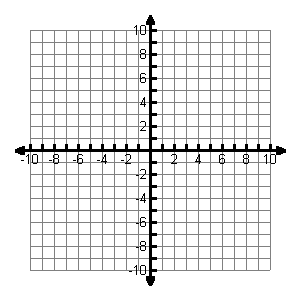
20. A (-7, 1) B( 4, -2) C (-3, 5) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Given the following vertices, graph each set of points:**

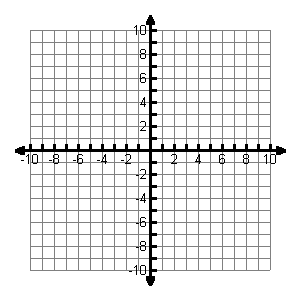
21. A(2, -1) B(4, 3) C(-1, 3) D(-3, -1) What shape does the figure make? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

SHOW ALL YOUR WORK.

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22. A(-3, 5) B(4, 4) C(4, -4) D(-5, 3) What shape does the figure make? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

SHOW ALL YOUR WORK.

23. A( -3,-1) B(-4, 2) C(5, 5) D(6,2 ) What shape does the figure make? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

SHOW ALL YOUR WORK.

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**Critical Thinking**

24. The midsegment of a trapezoid is a segment through the middle of the figure that runs parallel to the pair of sides that are parallel. Plot the given points to form a trapezoid. Then find the endpoints of the midsegment. T( -5, 2) R( 2, 1) M (2, -4) A (-5, -8)