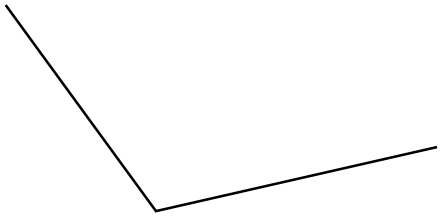
AGS 1 Name: _____ Period: _____ Date: _____

Unit 8 Review Geometry Constructions & Congruence

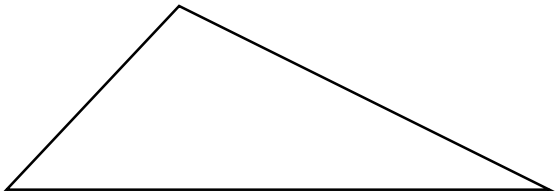
Constructions – Construction marks must be clear.

1. Copy the given line segments.

2. Copy the given angle.



3. Copy the given triangle.



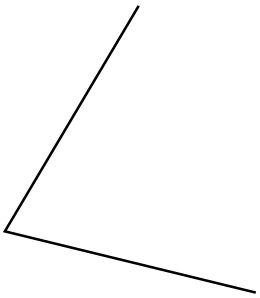
4. Bisect each of the given angles.

5. Bisect the given line segment to create a perpendicular bisector.

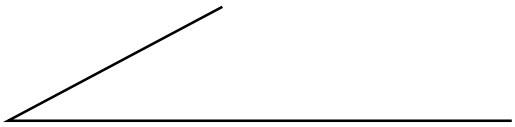
6. Make an equilateral triangle from the given line segment.

7. Make an isosceles triangle from the given line segment.

8. Make a rhombus from the given angle.



9. Make a parallelogram from the given angle.



10. Make a square with sides of the given length.

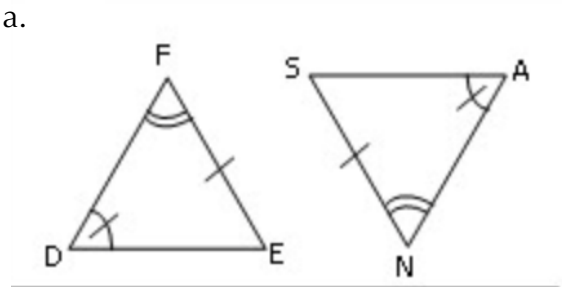
11. Make a rectangle with sides of the given length.

Congruence

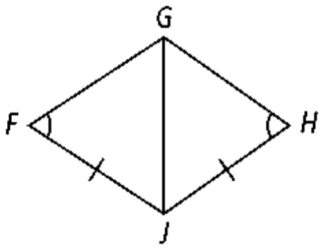
12. State the five relationships that prove congruence.

13. Give a basic proof for each pair of triangles that proves congruence.

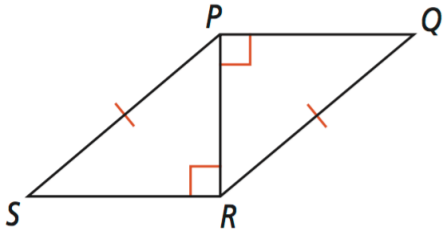
a.



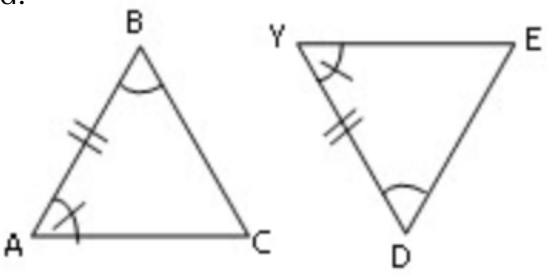
b.



c.



d.



Slope	Side Length
2 Sets of Parallel Sides ○ Perpendicular Sides ♦ Square ♦ Rectangle ○ No Perpendicular Sides ♦ Parallelogram ♦ Rhombus 1 Set of Parallel Sides ○ Trapezoid No Parallel Sides ○ Kite ○ Quadrilateral	4 Congruent Sides ○ Rhombus ○ Square 2 Different sets of Congruent Sides ○ Kite ○ Rectangle ○ Parallelogram 2 Congruent Sides and 2 Non-Congruent Sides ○ Isosceles Trapezoid No Congruent Sides ○ Quadrilateral ○ Trapezoid

Quadrilaterals

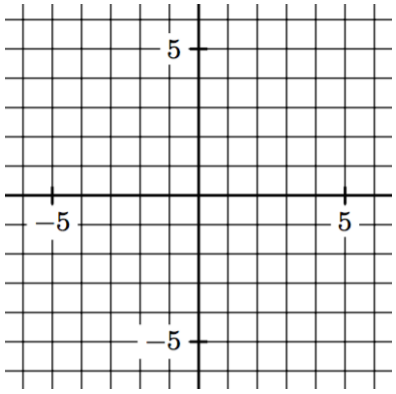
14. Find the distance between each set of points.

a. (-4, 0) and (3, 12)

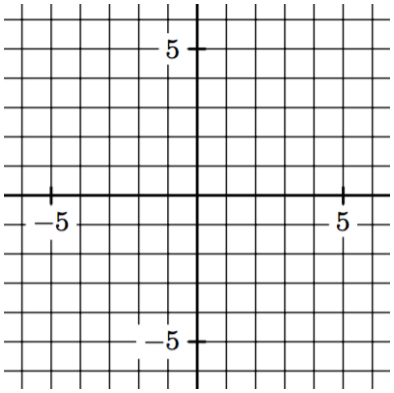
b. (8, -5) and (-3, -9)

15. Classify each quadrilateral, then find the perimeter.

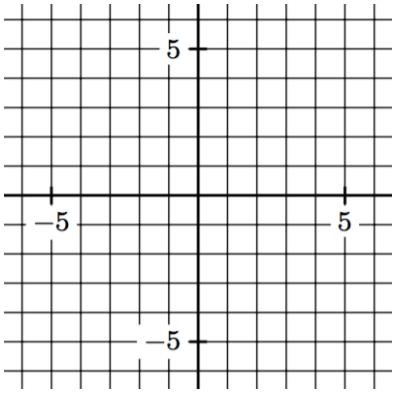
a. A (-2, 3), B (1, 5), C (4, 3), D (1, -3)



b. E (-2, 3), F (3, 3), G (5, -1), H (-3, -1)



c. M (0, 2), N (5, 2), O (2, -2), P (-3, -2)



16. State the slope that is perpendicular to the given slope.

a. $m = \frac{2}{3}$ b. $m = -3$ c. $m = 1$