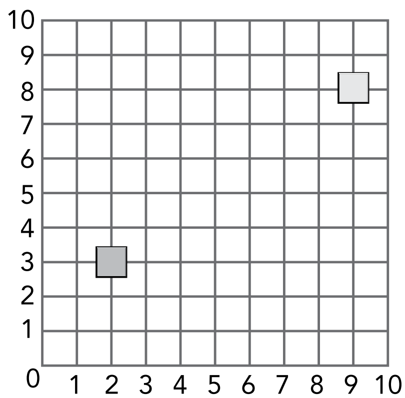
Name ______________________________

Use Centimeter Cubes to match each model. Write the ordered pair that corresponds to the location of the cube.

1.



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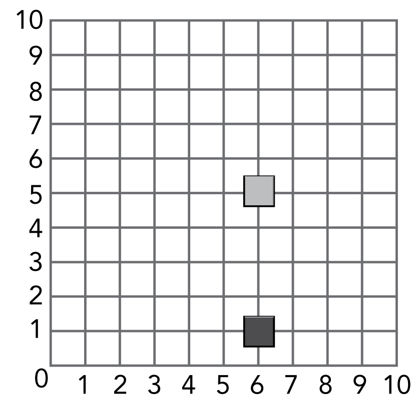
2.



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Using Centimeter Cubes and the coordinate grid, locate the point for each ordered pair. Then plot the point on the grid. Label each point.

3. *A* (1, 7)

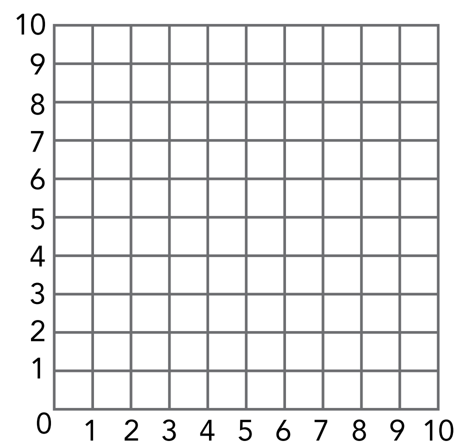
4. *B* (3, 3)

5. *C* (6, 2)

6. *D* (0, 5)

7. *E* (4, 0)

8. *F* (8, 9)



Graph each point on the coordinate grid. Label each point.

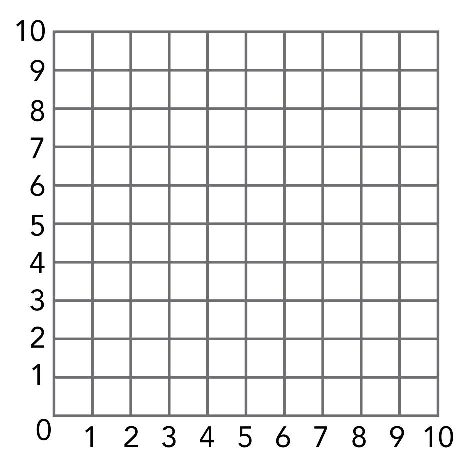
9. *L* (5, 2)

10. *M* (9, 1)

11. *N* (0, 2)

12. *P* (3, 4)

13. *Q* (2, 6)



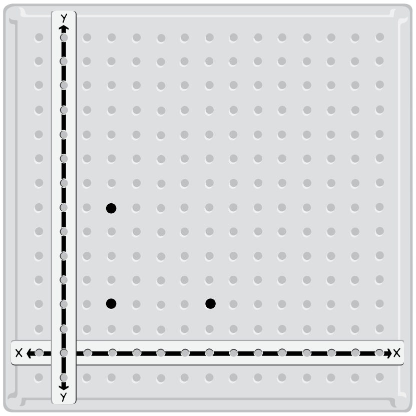
Name ______________________________

Challenge! Describe to a friend how to graph an ordered pair on a coordinate grid.

Name ______________________________

Use an XY Coordinate Pegboard, pegs, and rubber bands to model the points shown. Find the missing vertex of each rectangle. Write the ordered pair.

1.



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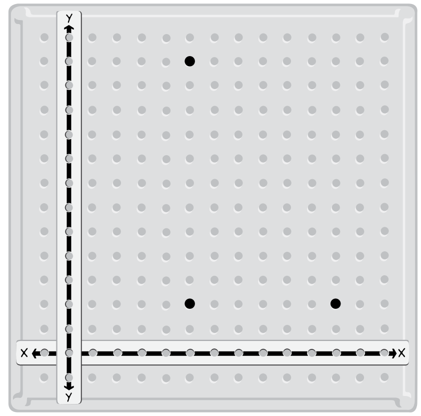
2.



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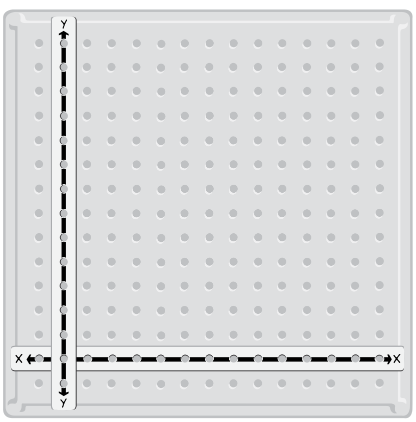
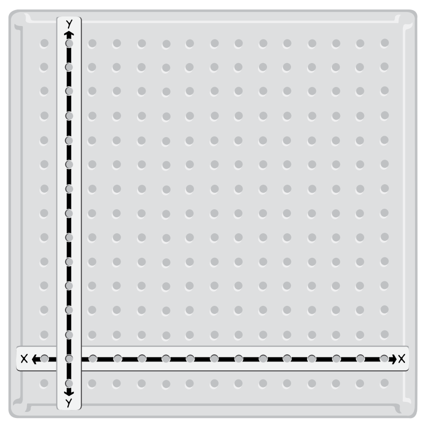
Using an XY Coordinate Pegboard, pegs, and rubber bands, model each rectangle. Sketch the rectangle on the pegboards. Write the ordered pair for the missing vertex.

3. (3, 6), (3, 2), (8, 6), __________



4. (4, 4), (9, 4), (9, 11), __________



Find the missing vertex of each rectangle. Write the ordered pair.

5. (5, 5), (7, 7), (7, 5), __________

6. (1, 8), (1, 5), (2, 5), __________

7. (7, 3), (7, 9), (4, 3), __________

8. (2, 2), (5, 2), (2, 5), __________

9. (3, 0), (3, 6), (4, 6), __________

10. (4, 1), (8, 5), (8, 1), __________

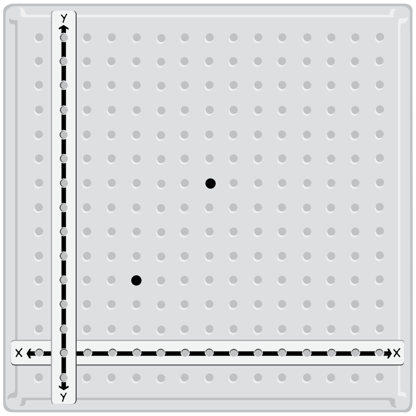
Name ______________________________

Challenge! If you are given two ordered pairs that are vertices of a rectangle and the ordered pairs have different *x*-coordinates and different *y*-coordinates, can you find the ordered pairs of the other two vertices? If the *x*-coordinates of the ordered pairs you are given are the same, can you find the ordered pairs of the other two vertices? Explain both of your answers. Draw a picture to help. Assume the sides of the rectangle are parallel and perpendicular to the axes.

Name ______________________________

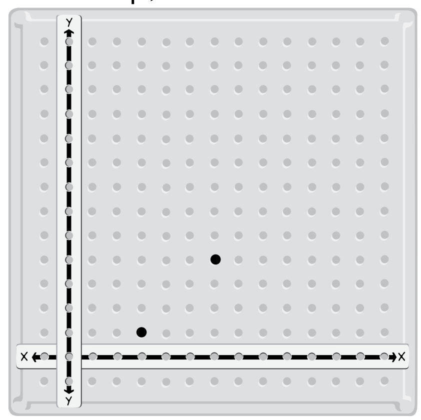
Use an XY Coordinate Pegboard and pegs to model each starting point and ending point. Find the ordered pair of the ending point, given the starting point.

1. From (6, 7), go 3 units left and 4 units down



Ending point: __________

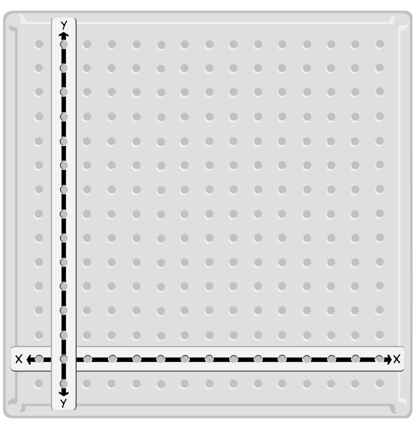
2. From (3, 1), go 4 units right, 3 units up, and 1 unit left



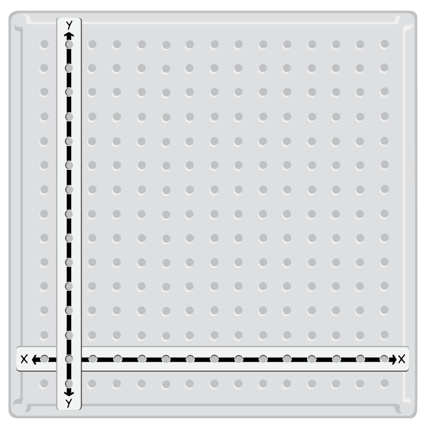
Ending point: __________

Using an XY Coordinate Pegboard and pegs, model each set of directions. Sketch the starting point and ending point. Write the ordered pair of the ending point.

3. **Start:** (2, 7); **Move:** 5 units right, 6 units down; **End:** __________



4. **Start:** (8, 9); **Move:** 3 units left, 4 units up; **End:** __________



Begin at the Start and follow the directions. Write the ordered pair where you end.

5. **Start:** (0, 2); **Move:** right 8 units, 4 units up; **End:** __________

6. **Start:** (6, 10); **Move:** left 1 unit, 3 units up; **End:** __________

7. **Start:** (4, 7); **Move:** left 2 units, 2 units down; **End:** __________

8. **Start:** (8, 6); **Move:** left 6 units, 3 units up; **End:** __________

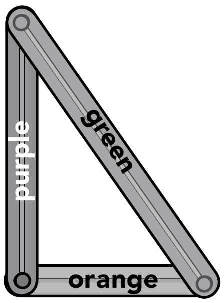
Name ________________________________

Challenge! From the point (5, 3) you are given the direction to move left. What are the possible x-values of the ordered pair of the new point?

Name ______________________________

Use AngLegs to model each triangle. Identify the triangle as acute, obtuse, or right. Also identify the triangle as equilateral, isosceles, or scalene.

1.



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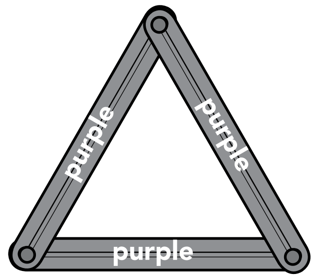
2.



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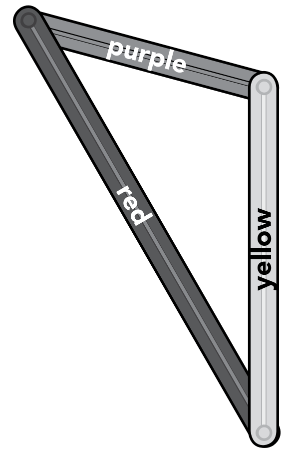
3.



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Using AngLegs, model each of the triangles named. Sketch the model.

4. acute, scalene

5. right, isosceles

6. acute, equilateral

7. obtuse, scalene

8. obtuse, isosceles

9. right, scalene

The side lengths of triangles are given. Idenfity each triangle with as many names as you can.

10. 4 ft, 4 ft, 4 ft

____

____

11. 6 in., 10 in., 12 in.

____

____

12. 12 cm, 12 cm, 5 cm

____

____

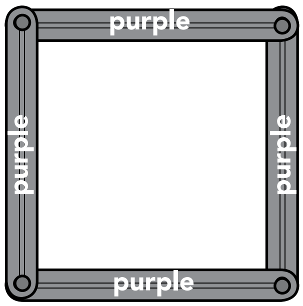
Name ___________________________________

Challenge! Can you draw or build an equilateral obtuse triangle? Explain why or why not. Draw a picture to help.

Name ______________________________

Use AngLegs to model each quadrilateral. Identify its characteristics. Name the quadrilateral.

1.



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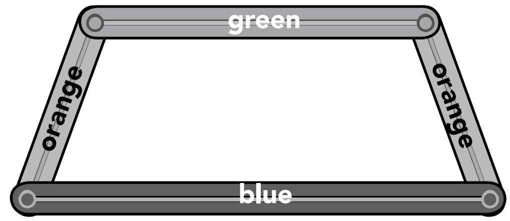
2.



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____

____

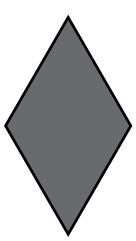
Using AngLegs, model each quadrilateral named. Sketch the model.

3. rectangle

4. parallelogram

Identify each quadrilateral by name. Name the characteristics of the figure.

5.



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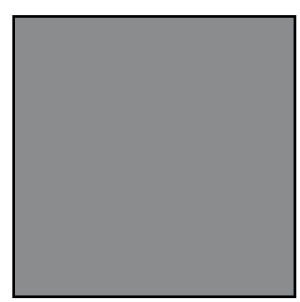
6.

____

____

7.



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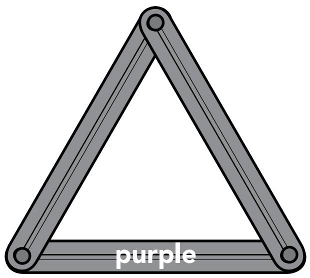
Name ___________________________________

Challenge! What do all quadrilaterals have in common? What do all parallelograms have in common? Name all the specific types of parallelograms and draw a picture of each.

Name ______________________________

Use AngLegs to model each regular polygon. What is the name of the polygon? Identify the sum of the measures of the interior angles of the polygon.

1.



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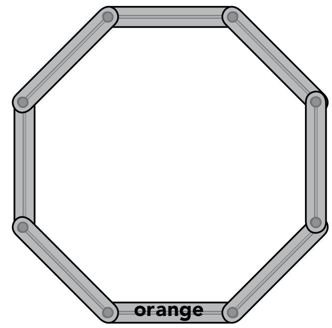
2.



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Using AngLegs, model each regular polygon named. Sketch the model. What is the sum of the measures of the interior angles of the polygon?

3. hexagon

____

4. pentagon

____

How many sides does each regular polygon have? What is the sum of the measures of the interior angles of each polygon?

5. decagon

____

____

6. heptagon

____

____

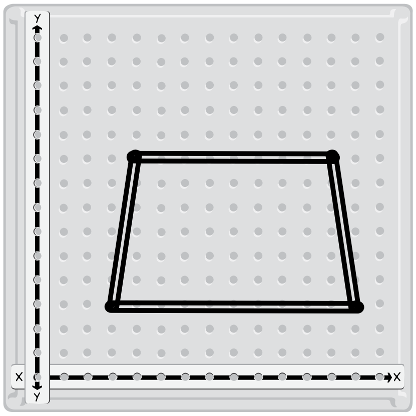
Name ___________________________________

Challenge! Can the sum of the measures of the angles of a regular polygon be equal to 450°? Explain.

Name ________________________________

Use an XY Coordinate Pegboard. Model each quadrilateral shown. Classify the quadrilateral by measuring its sides and its angles. Justify your answer.

1.



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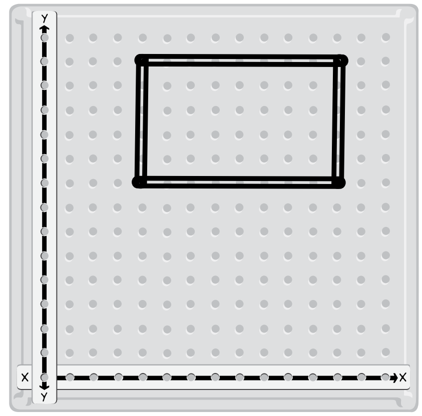
2.



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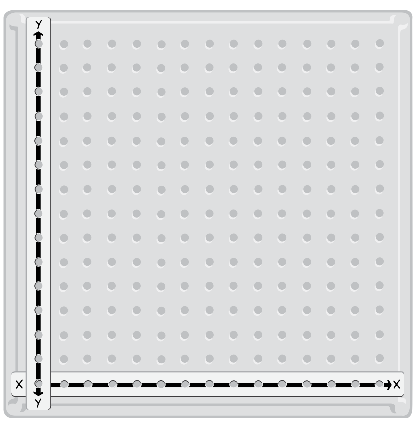
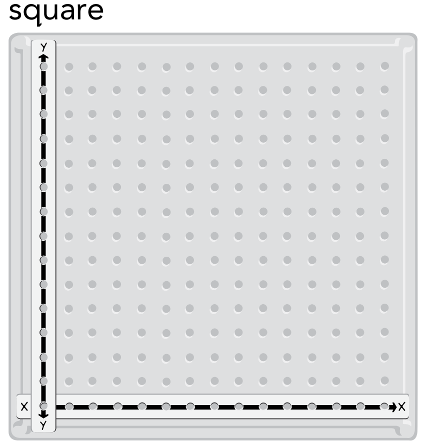
Using an XY Coordinate Pegboard, model each quadrilateral named. Sketch the model.

3. rhombus



4. square



Name each quadrilateral described.

5. four equal sides, one angle 50°, another angle 130°

____

6. two sides 6 inches long, two sides 4 inches long, one set of parallel lines, no right angles

____

7. two sides 30 cm long, two sides 70 cm long, four equal angles

____

8. four equal sides, four 90° angles

____

Name ___________________________________

Challenge! You are given the length of two adjacent sides of a quadrilateral. There are two sets of parallel sides and one right angle. Can you classify the quadrilateral? Explain. Can you identify the lengths of all four sides and all four angles? Draw a picture to help.