

5.1.D1 – Classifying Triangles on the Coordinate Plane

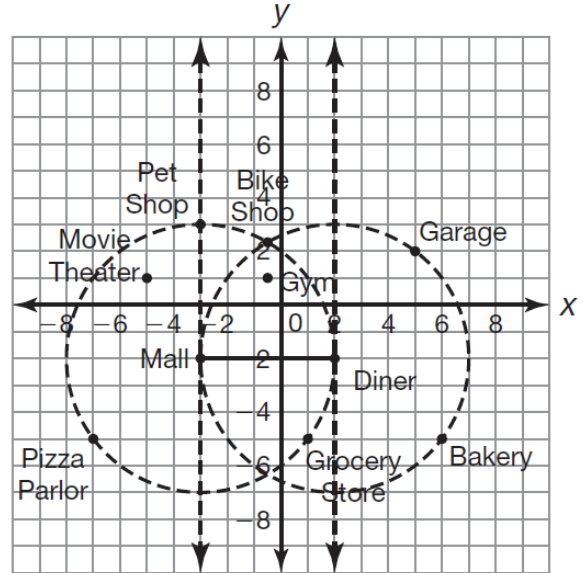
The grid shown is a map of Stoneville and the locations of several businesses in the town. A line segment has been drawn between the locations of the mall and the diner. Using this line segment as one side of a triangle, determine the business (or businesses) whose location, when connected with the line segment, would result in each of the following types of triangles.

1. An isosceles triangle

2. An acute triangle

3. A scalene triangle

4. A right triangle



5. An obtuse triangle

Use the distance formula to determine the distance between the following locations. Round your answer to the nearest tenth.

- | | |
|---|-----------------------------|
| 6. The movie theatre and the pizza parlor | 7. The diner and the garage |
| 8. The pet shop and the grocery store | 9. The mall and the bakery |

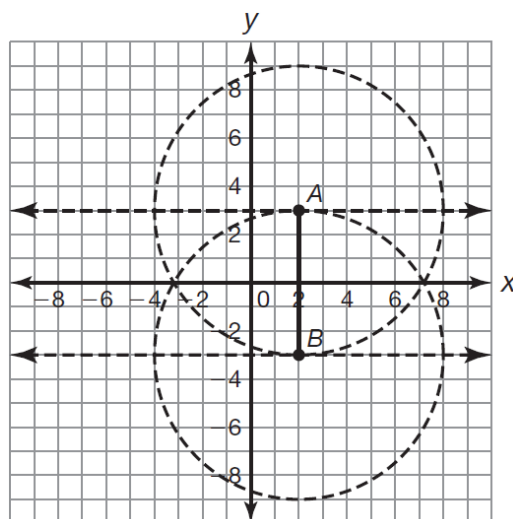
Determine the location of point C such that $\triangle ABC$ has each given characteristic. The graph shows line segment AB and circles A and B.

10. $\triangle ABC$ is a right triangle

11. $\triangle ABC$ is an acute triangle

12. $\triangle ABC$ is an obtuse triangle

14. $\triangle ABC$ is an isosceles triangle



13. $\triangle ABC$ is an equilateral triangle

15. $\triangle ABC$ is a scalene triangle