Perpendicular bisectors

Mathematics

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Try this

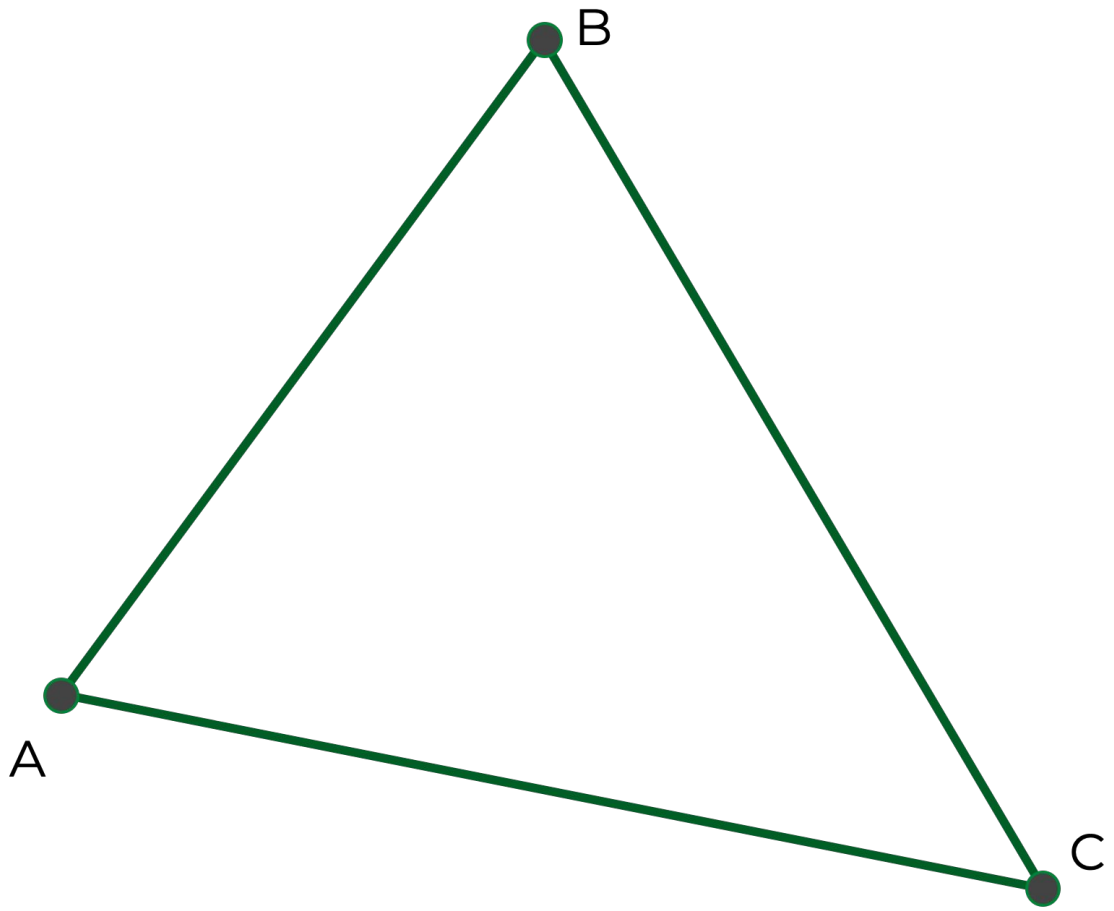
Draw a large random triangle and label the vertices A, B, C.

Fold the paper so A and B coincide, mark where the fold line meets AB.

Repeat for A and C, and B and C.

Join up these 3 points and repeat the process on the new triangle.

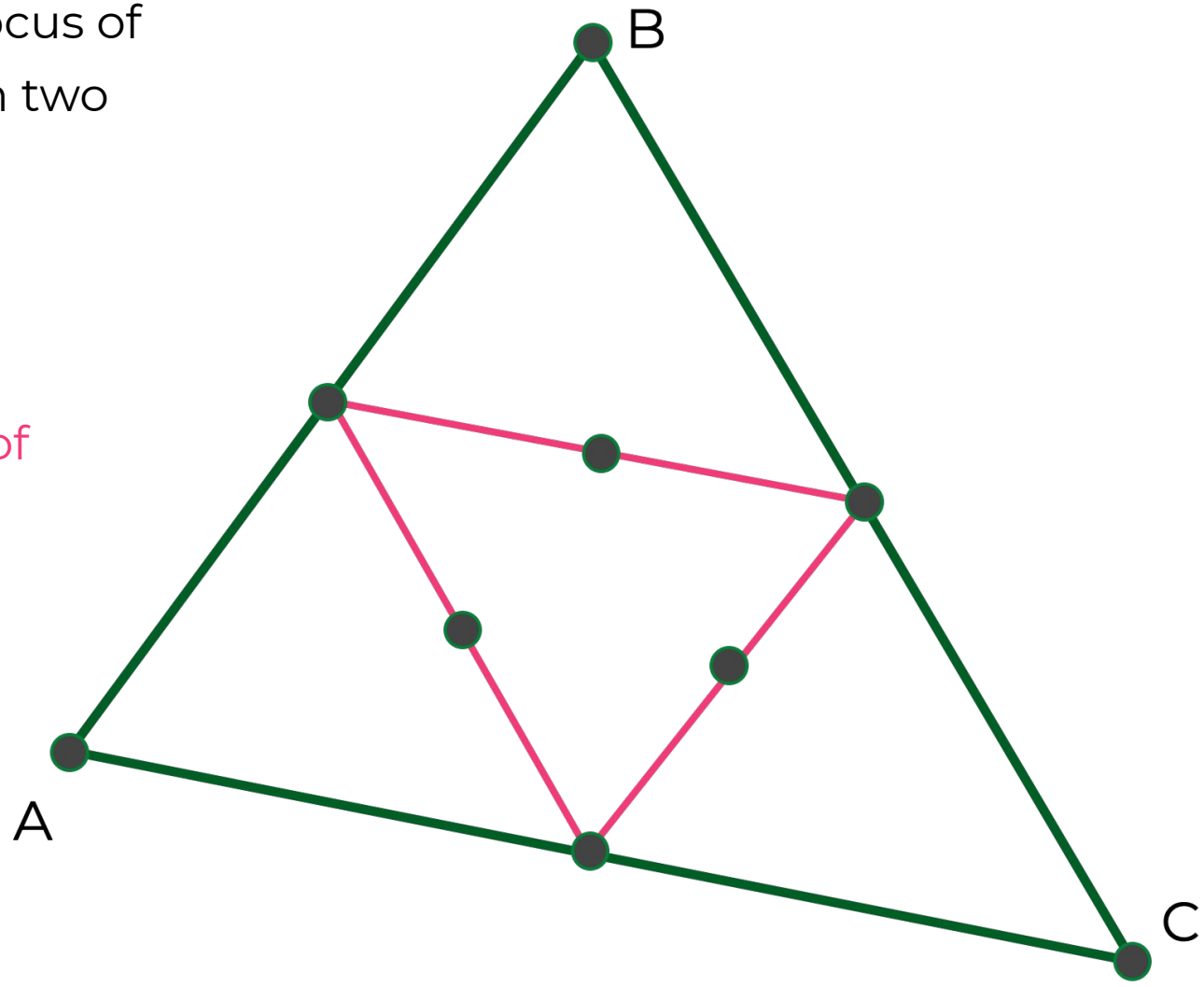
What do you notice?



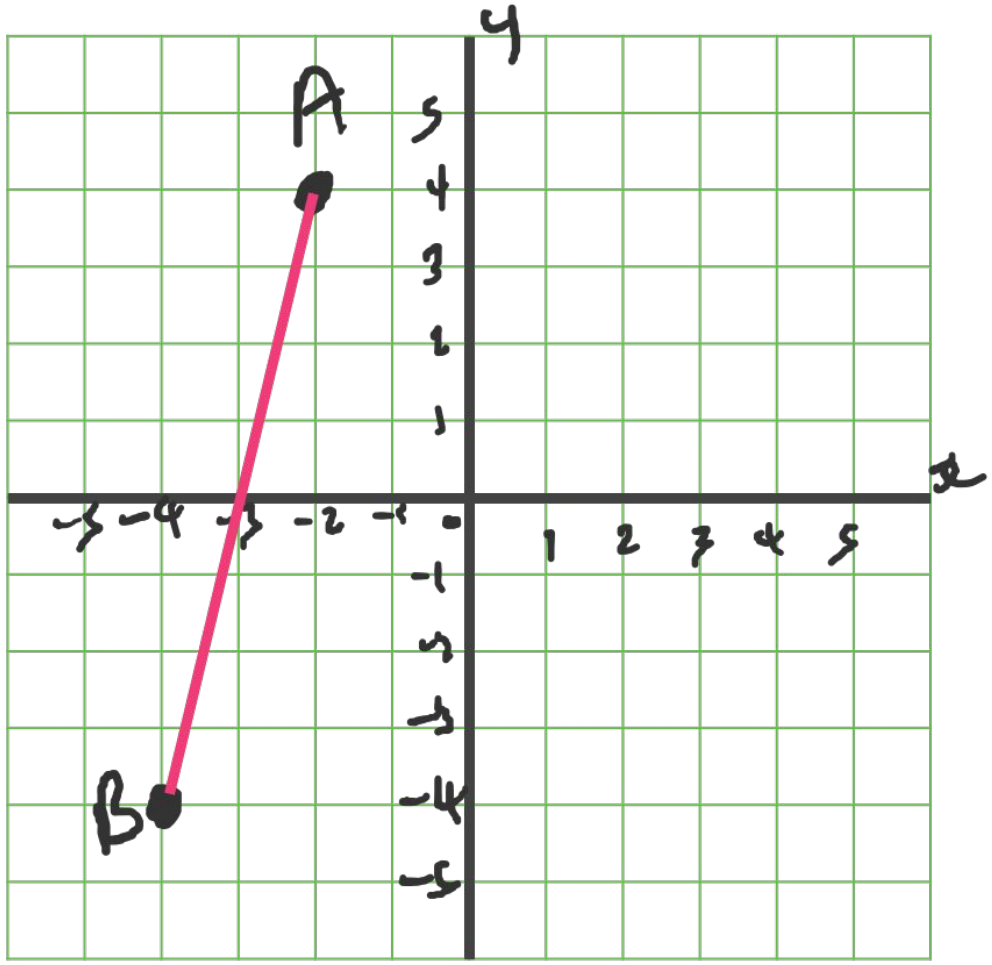
Connect

A **Perpendicular bisector** is a locus of points that are equidistant from two ends of a line segment.

If we have two points that are equidistant between two ends of a line segment we can draw a perpendicular bisector.



Connect

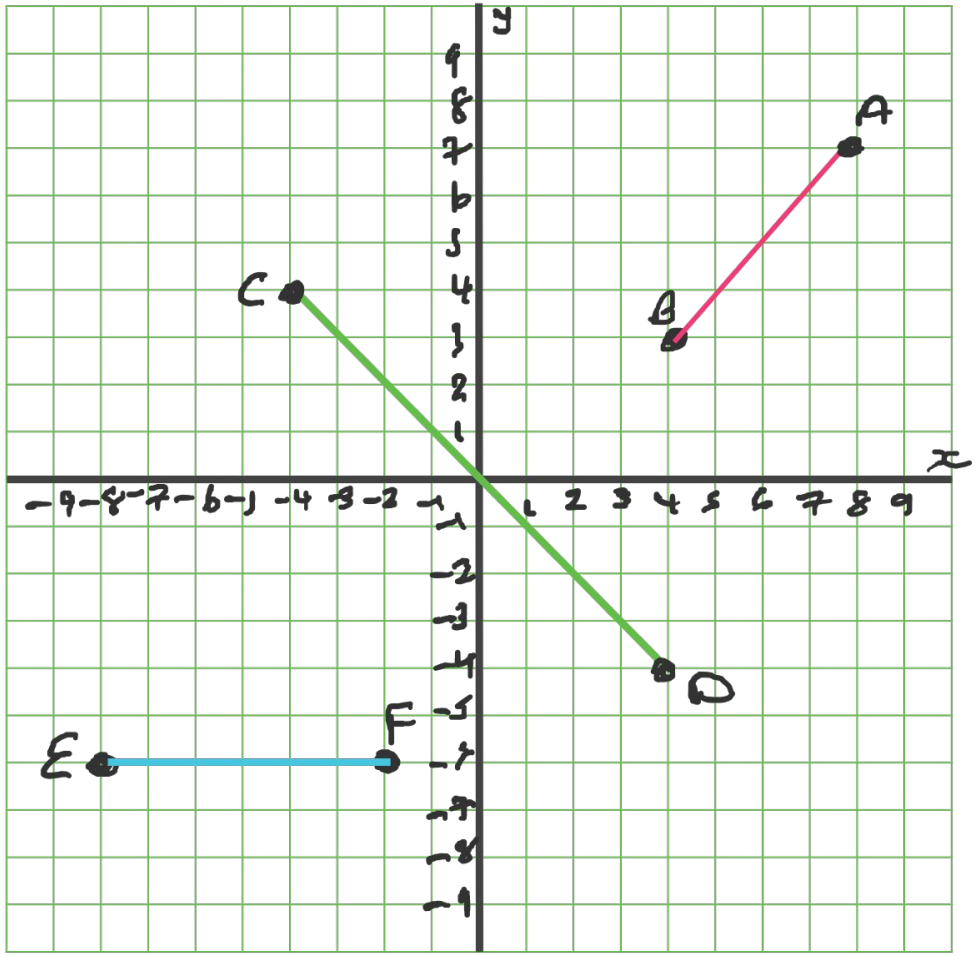


If we have two points that are equidistant between two ends of a line segment we can draw a perpendicular bisector.

- On this coordinate grid state the coordinate of a point on AB that is equidistant between A and B.
- State another coordinate, not on AB that is equidistant from A and B.

Independent task

For each of these line segments draw a perpendicular bisector.



Explore

Find the equation of the perpendicular bisector of each of these line segments.