

G3-M7-Lesson 5

1. Match the polygons with their appropriate banners. A polygon can match to more than one banner.

A polygon with all equal sides and all equal angles is called a regular polygon.

Regular octagon

Pentagon

Triangle

At least 1 set of parallel sides

All sides are equal.

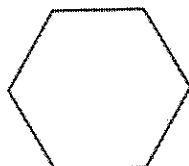
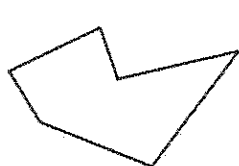
At least 1 right angle

All sides are not equal.

This pentagon has all equal sides. I can check using a ruler. But I know all the angles are not equal. It has 2 right angles, but the angle on the right is smaller than a right angle. So this pentagon can't be a regular pentagon.

I notice that this triangle only matches one attribute. It does not have all equal sides or all equal angles. I can check by using a ruler and a right angle tool to measure the sides and angles. I also see that it does not have 1 right angle or parallel sides.

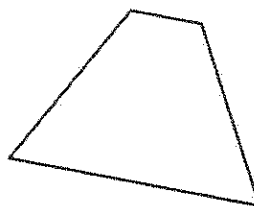
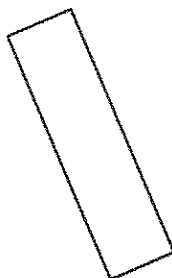
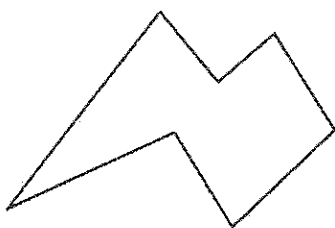
2. Compare the two polygons below. What is the same? What is different?



These polygons have the same name but look very different.

Both polygons have 6 sides, so they are both hexagons. The hexagon on the right is a regular hexagon because it has all equal sides and angles. The hexagon on the left does not have all equal sides and angles, so it is not a regular hexagon.

3. David draws the polygons below. Are any of them regular polygons? Explain how you know.



None of David's polygons are regular polygons. I know because I measured the sides and angles of each shape using my ruler and right angle tool, and none of these shapes have all equal sides and all equal angles.

My right angle tool is the corner of an index card. Using my measuring tools helps me to be precise.