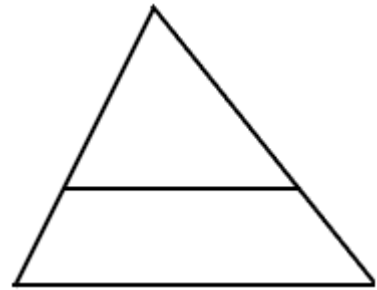
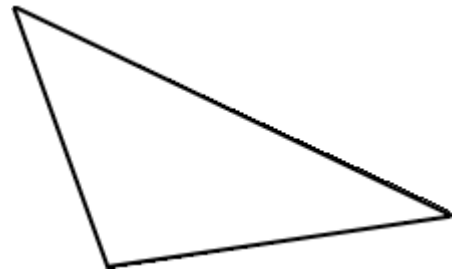
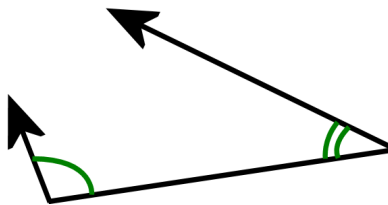


Polygons

1. **a.** Point out two pairs of corresponding angles.
- b.** Find out the angle measurements of these triangles.
How many angles do you need to measure (minimum)?
- c.** The two triangles are (similar/congruent).



2. These two pictures illustrate how it is ENOUGH to measure just two angles and the side *between* them to copy a triangle. In other words, you don't have to know all the angles and sides



to copy the triangle.

Draw a copy of the triangle.

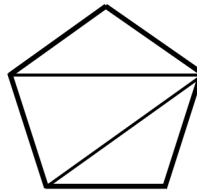
3. A regular pentagon is divided into three triangles.
The angle sum of each of the triangles is _____°;
therefore the total angle sum of the pentagon is

$$_ \times _ \text{ }^\circ = _ \text{ }^\circ.$$

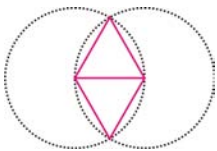
Make sure you understand why this works.

How many degrees are each of the five angles in a regular pentagon?

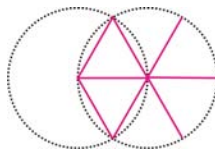
Use that fact to draw one.



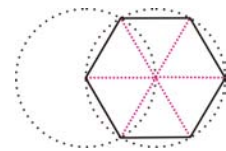
4. The pictures show how to construct a regular hexagon.



Draw an equilateral triangle and another triangle underneath it.



Extend the sides of the triangles until they meet the circumference of one of the circles.



Connect the points where the extended lines meet the circumference.

- a.** Draw one using a compass and a ruler.
- b.** What is the angle measure of each of the six angles in a regular hexagon?