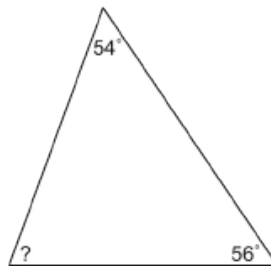




Chapter 6  
Geometry & Measurement

Lesson 3 of  
e-learning

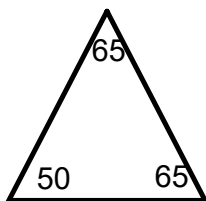
We name angles by side length (equilateral, isosceles and scalene) and interior angles (acute, right and obtuse)



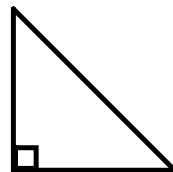
1. Find the sum
2. Name the triangle by length and interior angle

Part 2- Name the triangles base on the interior angles

a



b



A **regular polygon** has all equal sides and all equal angles  
-Has lines of symmetries

Name \_\_\_\_\_

Date \_\_\_\_\_

**REGULAR POLYGONS 1**



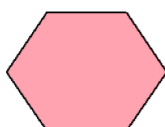
Equilateral triangle



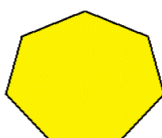
Square



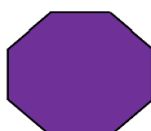
Regular Pentagon



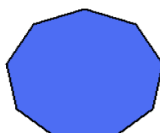
Regular Hexagon



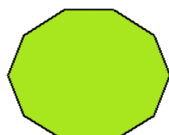
Regular Heptagon



Regular Octagon



Regular Nonagon

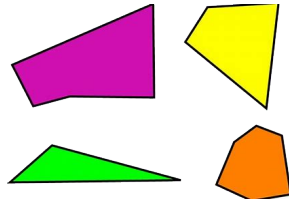


Regular Decagon



Regular Dodecagon

A **irregular polygon** does **NOT** have all equal sides and all equal angles

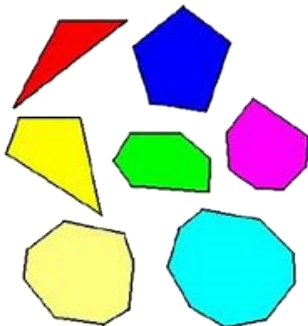


A **convex polygon** has all interior angles less than  $180^\circ$

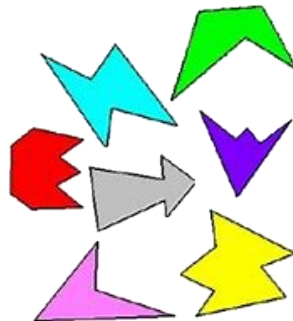
A **concave polygon** has at least 1 interior angle greater than  $180^\circ$

reflex angle is inside shape

Convex Polygons



Concave Polygons

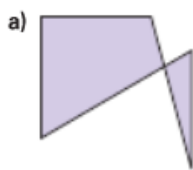


# Class/Homework

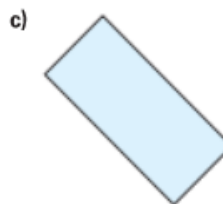
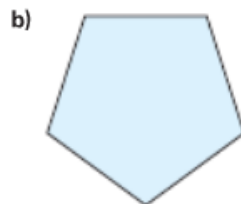
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**Practice**

1. Explain why each shape is not a polygon.



2. Is each polygon regular? How do you know?



3. A cell in a honeycomb approximates a regular hexagon.

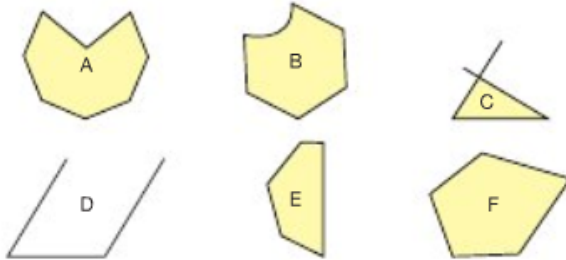
a) Suppose  $\angle A = 120^\circ$ . What are the measures of angles B, C, D, E, and F?

b) Suppose side AB has length 9 cm. What are the lengths of sides BC, CD, DE, EF, and FA?



4. Your teacher will give you a large copy of these shapes.

- a) Sort these shapes into sets of polygons and non-polygons. Explain how you decided where to place each shape.



- b) Draw a different shape that belongs in each set. Explain how you know that it belongs.

Polygons

Non Polygons

