Construct Triangles and Regular Polygons (from inscribed circles) – iSS8

Construct a Triangle with Given Lengths

Example
Construct a triangle with sides 2, 4 and 5cm.

Solution
Draw the longest side as the base. 

With compasses centred at one end, draw an arc with radius 2cm. 

With compasses centred at the other end, draw a crossing arc with radius 4cm.

Your Turn!!
a) Construct a triangle with sides 3, 5 and 7cm.

Regular Polygons

Example
Draw a regular hexagon, using a circle.

Solution
Hexagons are 6 sided. Divide a circle into 6 equal parts so that every part is 360° ÷ 6 = 60°. On a 360° protractor this means making marks at; 0°, 60°, 120°, 180°, 240° & 300°.

Your Turn!!
b) Draw a regular pentagon, using a circle.

RAPID ‘ACID’ TEST – Blank out the page above before answering these!
1. Construct a triangle with sides 3, 4 and 6cm.
2. Draw a regular 10-sided polygon.