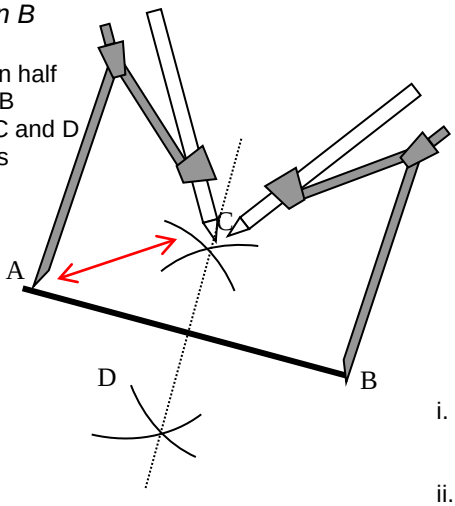
Construction

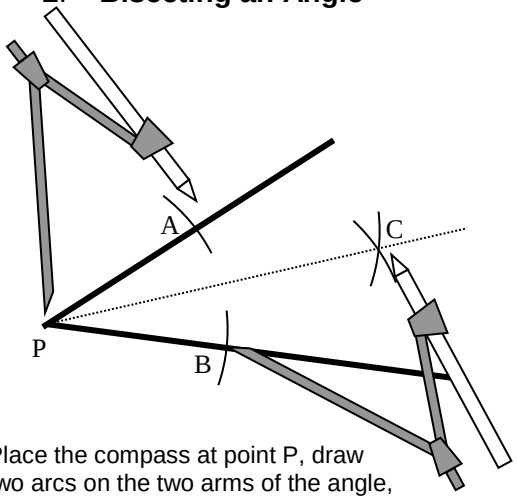
1. Perpendicular Bisector a Line (Bisecting a line / Equidistant)

The area is closer to A than B

i. Open the compass more than half the distance between A and B
ii. Draw two arcs that cross at C and D
iii. Draw a line from C to D that's perpendicular to A, B

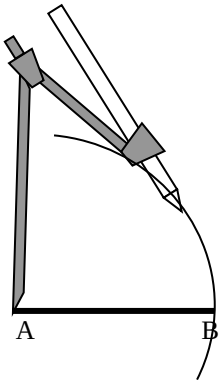


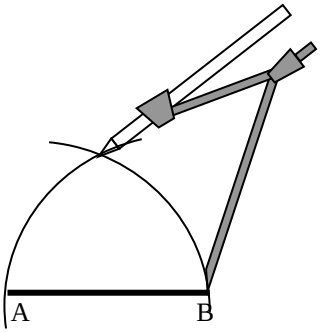
2. Bisecting an Angle

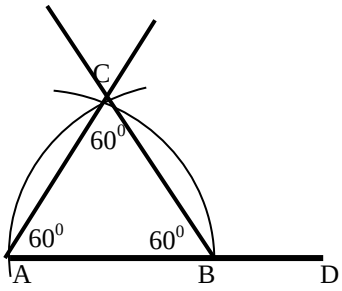


i. Place the compass at point P, draw two arcs on the two arms of the angle, Label A and B
ii. Place compass at point A draw an arc at C, repeat with B, Join point C and P

3. Constructing 60^0 (an Equilateral Triangle) 30^o, 120^o





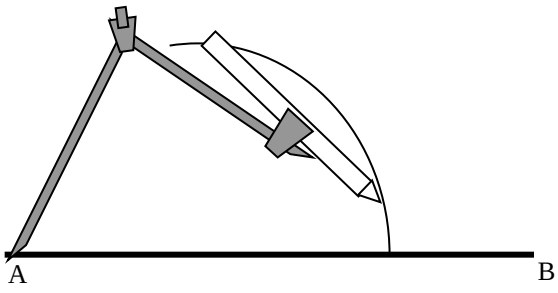


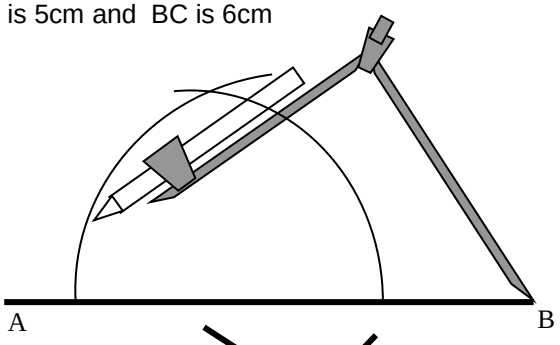
i. Draw an arc, keep the compass a fixed distance
ii. Place the compass at point B (don't change the compass width) Draw an arc that crosses the first arc
iii. Using a ruler draw EQUILATERAL triangle ABC

iv. To make 30^o, bisect angle CAB or ABC
To make 120^o use the obtuse angle CBD

4. Constructing a triangle with given lengths

Construct triangle ABC. Were length AB is 7cm, AC is 5cm and BC is 6cm





i. Draw a 7cm line AB with a ruler
ii. Open compass to 5cm, place compass at A draw and arc
iii. Open compass to 6cm, place compass at B draw and arc
iv. Using a ruler complete triangle.
LEAVE ARC LINES VISABLE