

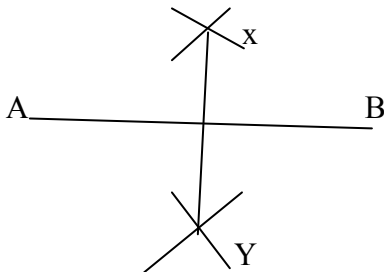
**ZAMANI COLLEGE KADUNA**  
**JS3 Mathematics**  
**Holiday Assignment.**

**CONSTRUCTION**

**BISECTION OF A LINE:**

**ACTIVITIES:**

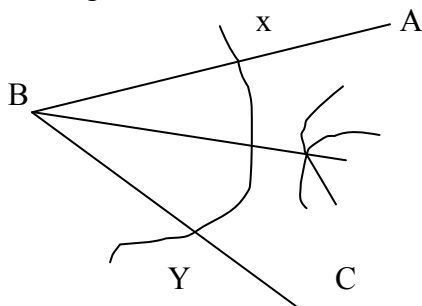
- 1 a. Draw a line,  $\overline{AB}$ .
- b. Open your compass to a radius, greater than  $\frac{1}{2} \overline{AB}$ ; with A as centre draw arcs on both sides of  $\overline{AB}$ .



- c. With B as centre, using, the same radius draw arcs on both sides of  $\overline{AB}$  to cut the 1<sup>st</sup> pair of arcs at x and y.
- d. Join x to y.
- e. Line xy is the bisector of line AB.

**2. BISECTION OF AN ANGLE**

- a. Draw angle ABC



- b. Open your compass to a reasonable radius, with B as centre, draw an arc to cut  $\overline{AB}$  at y.
- c. Using X as centre, radius greater than  $\frac{1}{2} \overline{xy}$ , draw an arc.
- d. using y as centre, with the same radius, draw the 2<sup>nd</sup> arc to cut the 1<sup>st</sup> at m.
- e. Join m to B.

**3. TO CONSTRUCT A PERPENDICULAR FROM A POINT ON THE LINE:**

- a. Draw line AB; mark the point, P on the line where the perpendicular is to be constructed.
- b. With P as centre, using any reasonable radius, draw arcs to cut  $\overline{AB}$  at X and Y
- c. Bisect XY as in I.

