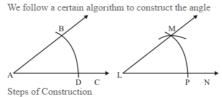


Constructions Ex 17.2 Q1

Answer:

We are asked to draw an angle BAC and construct another angle equal to angle BAC



STEP1: Draw an angle of any measure, and label it as $\angle BAC$. We have to construct another angle equal to this angle.

STEP2: Draw a ray LN.

STEP3: With centre A and radius equal to AB, draw an arc cutting the ray AC at point D.

STEP4: With centre L and taking the same radius as AB, draw an arc cutting the ray LN at point P.

STEP5: With centre P, and radius equal to BD, draw an arc intersecting the arc drawn in step 4, at

point M.

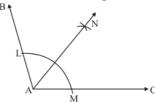
STEP6: Draw ray LM.

 $\angle MLN = \angle BAC$

Constructions Ex 17.2 Q2

Answer:

We are asked to construct an angle and bisect it and measure each angle We will follow a certain algorithm to construct



Steps of construction

STEP1: Draw an obtuse angle of any measure. For example take 100 degrees. And label it as \angle BAC. STEP2: With centre as A, and radius of any measure, draw an arc intersecting the ray AB and AC, at L and M respectively.

STEP3: With centre M and radius greater than half of LM, draw an arc inside the cone.

STEP4: With centre L and taking the same radius as in STEP 3, draw another arc intersecting the previous one at N.

STEP5: Draw the ray AN. This is the angle bisector of $\angle\,\textsc{BAC}.$

After measurement, we can find out that, ∠BAN=∠NAC=50°.

********* END *******