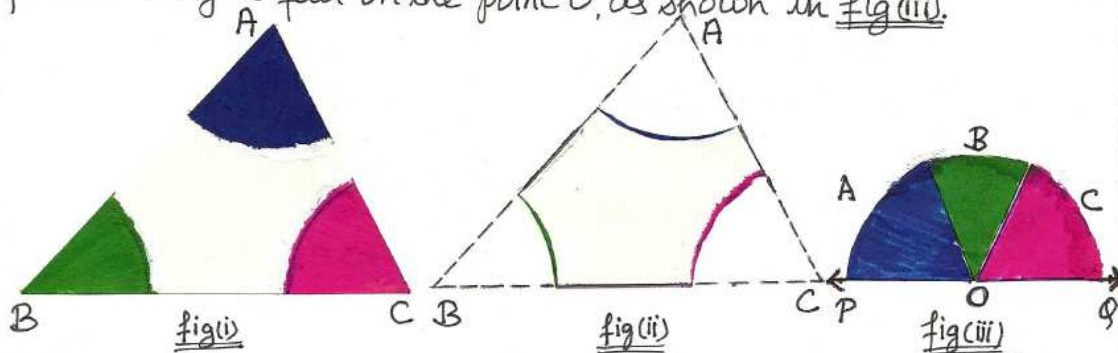


CLASS: IX, MATH ACTIVITY NO.: 1. SUM OF ANGLES OF A TRIANGLE

OBJECTIVE: To verify that the sum of all the three angles of a triangle is 180° (by paper cutting and pasting method).

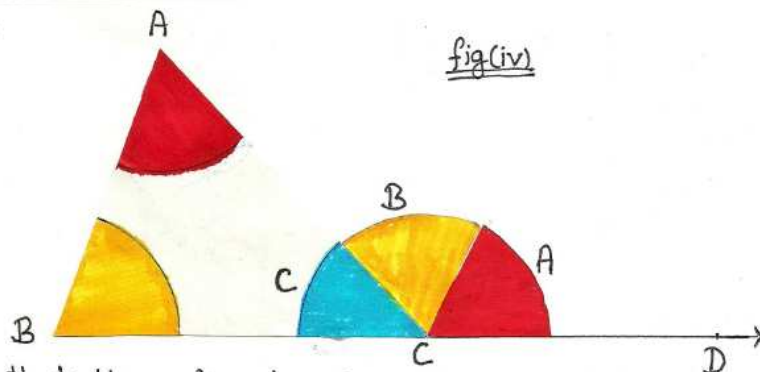
DESIGN AND OR APPROACH TO THE ACTIVITY: 1) The linear pair axiom 2) Definition and meaning of adjacent angles.

PROCEDURE: 1) Draw any triangle ABC on a white sheet of paper (fig(i)) 2) Make triplicate cut-outs of the triangle. 3) Colour the angles A, B and C with different colours. 4) Make cut-outs of the three angles. 5) Draw a line PQ on a sheet of paper and mark a point O on it as shown in fig(ii). 6) Paste the cut-outs of the three angles adjacent to each other along the line PQ such that the vertices of these angles fall on the point O, as shown in fig(iii).



RESULT: We observe that the straight angle POQ is exactly covered by the cut-outs of angles A, B and C.
 $\therefore \angle A + \angle B + \angle C = 180^\circ$. Hence Verified.

COROLLARY:



We observe that the cut-outs of angles A and B exactly cover $\angle ACD$. $\therefore$, Ext. $\angle ACD =$ sum of its two interior opposite angles A and B.