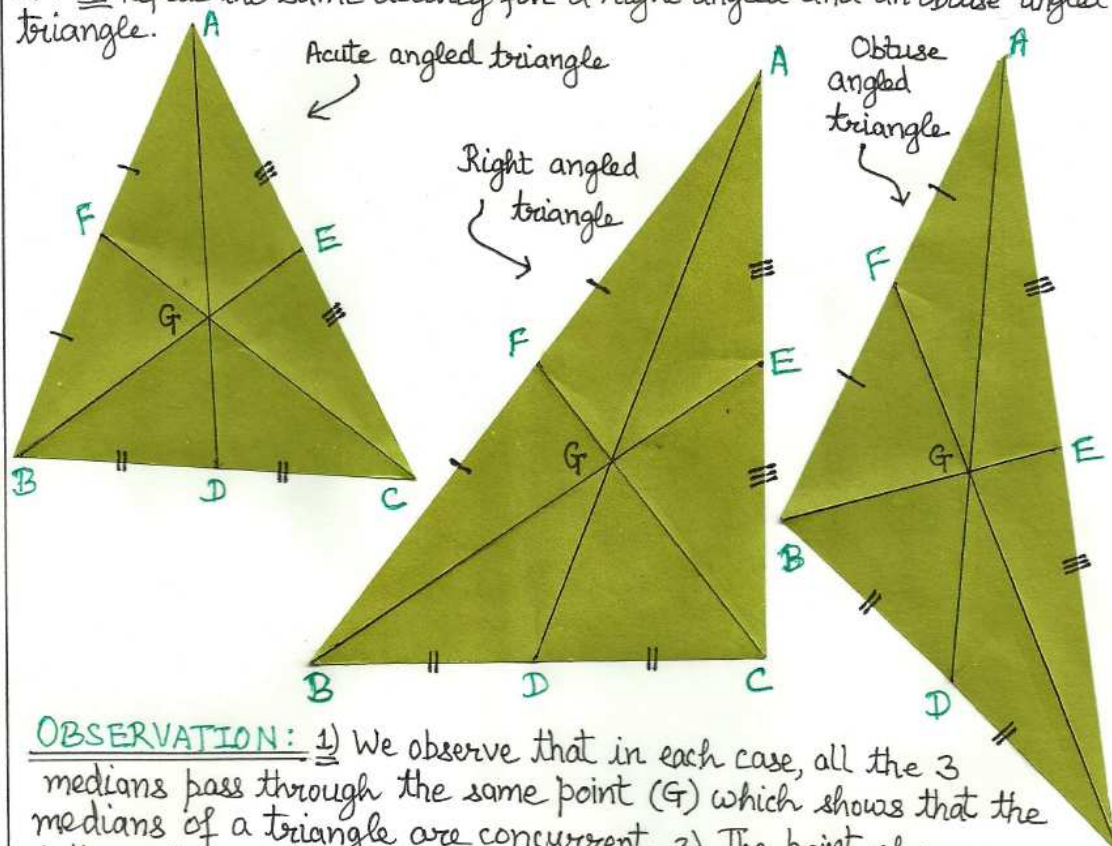


CLASS: X. MATH ACTIVITY NO.: 4. CENTROID OF A TRIANGLE.

OBJECTIVE: To illustrate that the medians of a triangle are concurrent and the point of concurrency (centroid) always lies inside the triangle.

DESIGN AND OR APPROACH TO THE ACTIVITY: 1) Knowledge of different types of triangles. 2) Concept of median line segment. 3) Concept of concurrent lines. 4) Knowledge of obtaining the mid-point of a line segment by paper-folding.

PROCEDURE: 1) Take a coloured paper and cut an acute angled triangle ABC from this paper. 2) Fold the side BC of  $\triangle ABC$  keeping the point B exactly on the point C and press the fold such that the mid-point D of BC is obtained. 3) Similarly, repeat this process to find the mid-points E and F of other two sides AC and AB respectively. 4) Fold the  $\triangle ABC$  along AD and press the paper to get a clear crease. 5) Mark a line by a pen on this crease AD as a median of  $\triangle ABC$ . 6) Similarly, obtain the other two medians BE and CF. 7) Repeat the same activity for a right angled and an obtuse angled triangle.



OBSERVATION: 1) We observe that in each case, all the 3 medians pass through the same point (G) which shows that the medians of a triangle are concurrent. 2) The point of concurrency of the medians (the centroid) of the triangle always lies inside the triangle.