

**SHEET 1**

**PENANG SANGAM HIGH SCHOOL**

**P. O. BOX 44, RAKIRAKI**

**LESSON NOTES - 11**

**SCHOOL: PENANG SANGAM HIGH**

**SUBJECT: TECHNICAL DRAWING**

**YEAR/ LEVEL: 11 C/D**

Strand	TD11.1. GEOMETRY
Sub - Strand	TD11.1.2 CENTROIDS
Content Learning Outcome	TD11.1.2.1 Construct the centroid of simple geometrical shapes and objects with an appreciation of the significance of centroid.

**CENTROID**

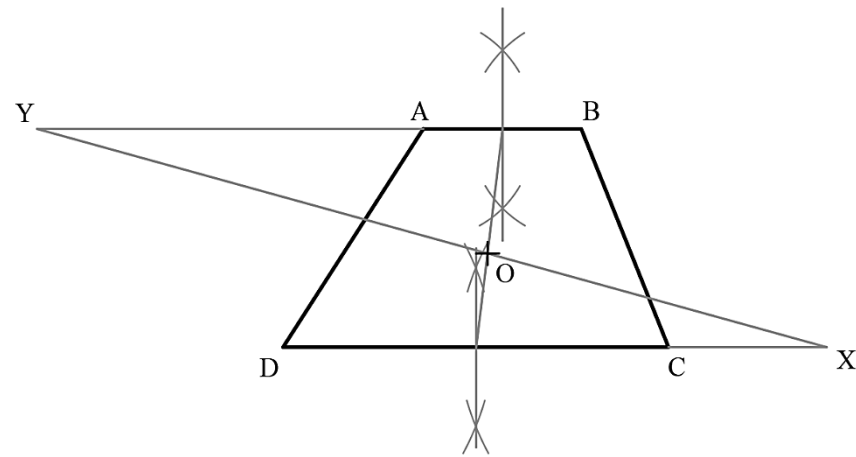
By the end of this topic, students will:

- Define centroid and state its significance.
- Construct centroid of simple geometrical shapes.
- Apply the use of centroid in original articles.

**WORKED EXAMPLES**

**How to find the centre of a trapezium?**

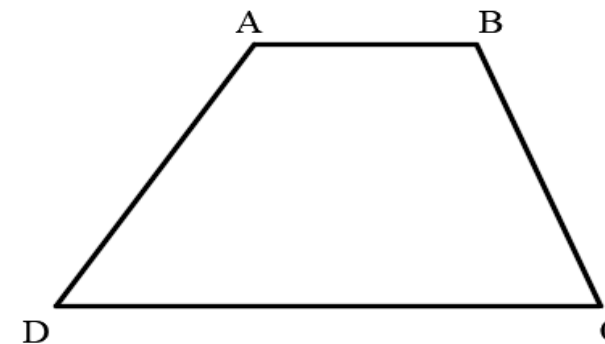
- Bisect the two parallel sides (AB & CD) and join the midpoints.
- Extend the parallel sides. Add the length of the opposite side as shown, (AB = XC & CD = AY).
- Join X and Y which will intersect the line joining the midpoints for the centroid, O.



**QUESTION 1**

**Given:** A Trapezium

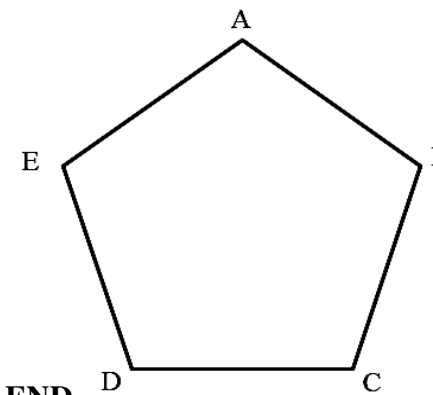
**Required:** Locate the centroid.



**QUESTION 2**

**Given:** A Pentagon

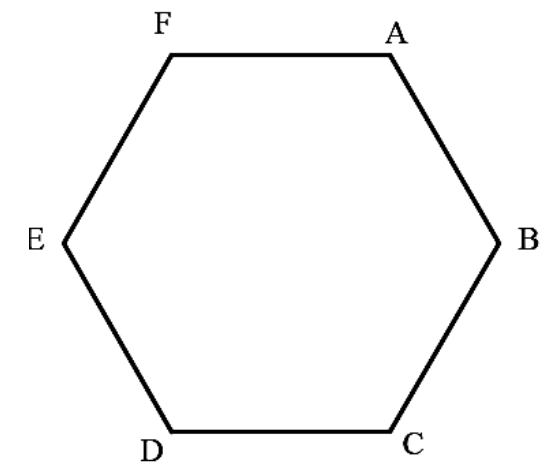
**Required:** Locate the centroid.



**QUESTION 3**

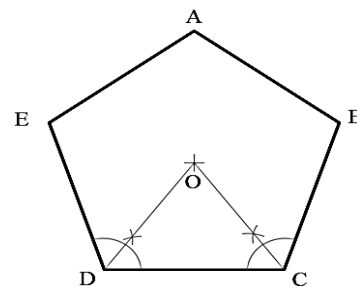
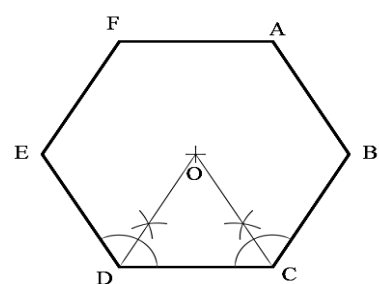
**Given:** A Hexagon

**Required:** Locate the centroid.



**How to find the centre of a hexagon?**

Either join the diagonals or bisect two angles to find the centroid of a hexagon.



**THE END**