

Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: X

Date:

Name:

ID No.....

State whether the following statements are true or false. Justify your answer.

- i. If $\frac{DE}{PQ} = \frac{EF}{PR}$ and $\angle D = \angle Q$, then $\triangle DEF \sim \triangle PQR$.

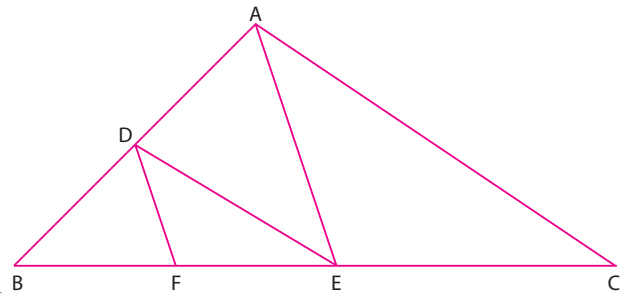
Sol. _____

- ii. P and Q are the points on the sides DE and DF of a triangle DEF such that DP = 4 cm, PE = 14 cm, DQ = 6 cm and DF = 21 cm. Then PQ || EF.

Sol. _____

- iii. In Fig. 4.10, DE || AC and DF || AE. Prove that $\frac{BF}{FE} = \frac{BE}{EC}$.

Sol. _____



- iv. Diagonals of a trapezium PQRS intersect each other at the point O, PQ || RS and PQ = 3RS. Find the ratio of the areas of triangles POQ and ROS.

Sol. _____

