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(Affiliated to CBSE up to +2 Level)

CLASS: X

SUB.: MATHS (NCERT BASED)

DATE: 10-09-2020

To complete this exercise

- In Fig. 6.20, $DE \parallel OQ$ and $DF \parallel OR$. Show that $EF \parallel QR$.
- In Fig. 6.21, A, B and C are points on OP, OQ and OR respectively such that $AB \parallel PQ$ and $AC \parallel PR$. Show that $BC \parallel QR$.
- Using Theorem 6.1, prove that a line drawn through the mid-point of one side of a triangle parallel to another side bisects the third side. (Recall that you have proved it in Class IX).
- Using Theorem 6.2, prove that the line joining the mid-points of any two sides of a triangle is parallel to the third side. (Recall that you have done it in Class IX).
- ABCD is a trapezium in which $AB \parallel DC$ and its diagonals intersect each other at the point O. Show

$$\text{that } \frac{AO}{BO} = \frac{CO}{DO}.$$

- The diagonals of a quadrilateral ABCD intersect each other at the point O such that

$$\frac{AO}{BO} = \frac{CO}{DO}. \text{ Show that ABCD is a trapezium.}$$

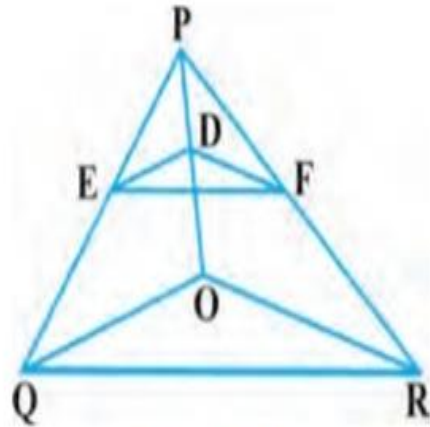


Fig. 6.20

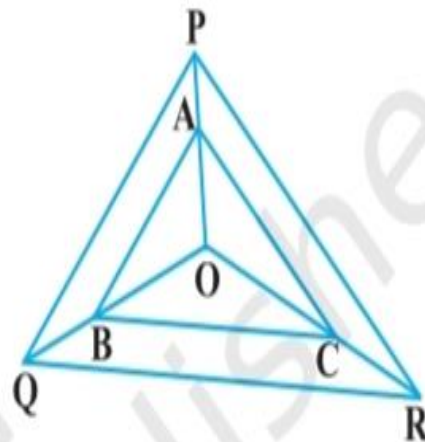


Fig. 6.21