

CBSE Class –VII Mathematics

NCERT Solutions

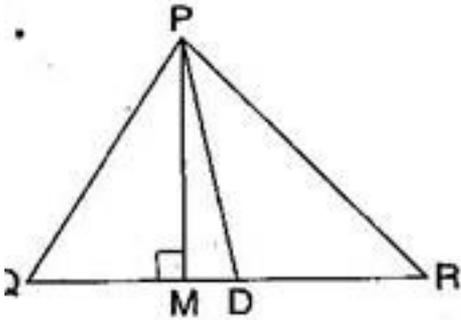
Chapter 6 The Triangle and its Properties (Ex. 6.1)

**Question 1.** In  $\triangle PQR$ , D is the mid-point of  $\overline{QR}$ .

$\overline{PM}$  is \_\_\_\_\_

PD is \_\_\_\_\_

Is  $QM = MR$  ?



**Answer:** Given:  $QD = DR$

$\therefore \overline{PM}$  is altitude.

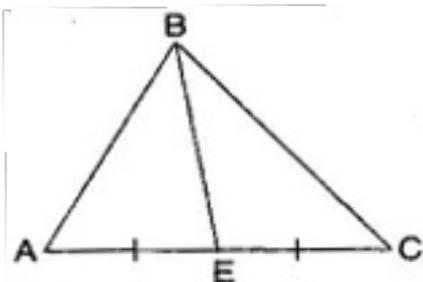
PD is median.

No,  $QM \neq MR$  as D is the mid-point of QR.

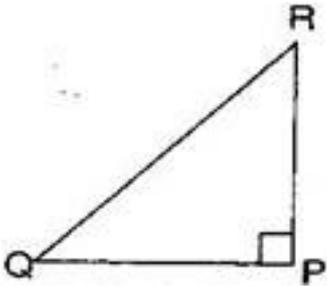
**Question 2.** Draw rough sketches for the following:

1. In  $\triangle ABC$ , BE is a median.
2. In  $\triangle PQR$ , PQ and PR are altitudes of the triangle.
3. In  $\triangle XYZ$ , YL is an altitude in the exterior of the triangle.

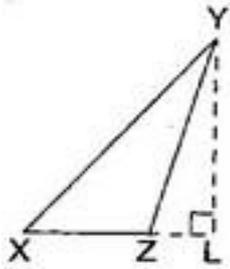
**Answer:** (a) Here, BE is a median in  $\triangle ABC$  and  $AE = EC$ .



(b) Here, PQ and PR are the altitudes of the  $\triangle PQR$  and  $RP \perp QP$ .



(c) YL is an altitude in the exterior of  $\triangle XYZ$ .



**Question 3.** Verify by drawing a diagram if the median and altitude of an isosceles triangle can be the same.

**Answer:** Isosceles triangle means any two sides are same.

Take  $\triangle ABC$  and draw the median when  $AB = AC$ .

AL is the median and altitude of the given triangle.

