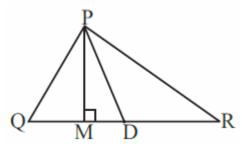
Access answers to Maths NCERT Solutions for Class 7 Chapter 6 – The Triangle and its Properties Exercise 6.1

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



(i) \overline{PM} is .

Solution:-

Altitude

An altitude has one end point at a vertex of the triangle and other on the line containing the opposite side.

(ii) PD is.

Solution:-

Median

A median connects a vertex of a triangle to the mid-point of the opposite side.

(iii) Is QM = MR?

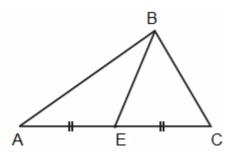
Solution:-

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

- 2. Draw rough sketches for the following:
- (a) In ΔABC, BE is a median.

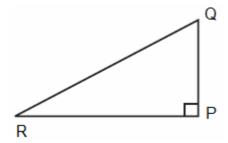
Solution:-

A median connects a vertex of a triangle to the mid-point of the opposite side.



(b) In ΔPQR, PQ and PR are altitudes of the triangle.

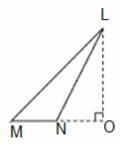
Solution:-



An altitude has one end point at a vertex of the triangle and other on the line containing the opposite side.

(c) In Δ XYZ, YL is an altitude in the exterior of the triangle.

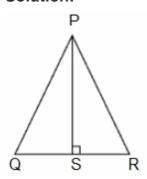
Solution:-



In the figure we may observe that for ΔLMN , LO is an altitude drawn exteriorly to side LN which is extended up to point L.

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

Solution:-



Draw a Line segment PS \perp BC. It is an altitude for this triangle. Here we observe that

length of QS and SR is also same. So PS is also a median of this triangle.