

Exercise 6.1

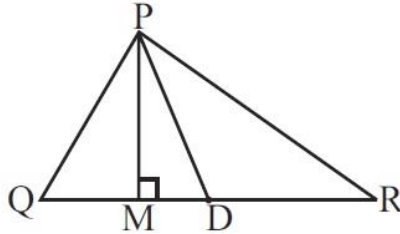
Question 1:

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

\overline{PM} is _____

PD is _____

Is $QM = MR$?



Answer 1:

Given: $QD = DR$

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

PD is median.

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

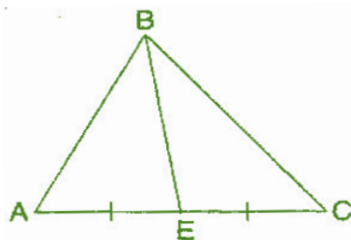
Question 2:

Draw rough sketches for the following:

- (a) In $\triangle ABC$, BE is a median.
- (b) In $\triangle PQR$, PQ and PR are altitudes of the triangle.
- (c) In $\triangle XYZ$, YL is an altitude in the exterior of the triangle.

Answer 2:

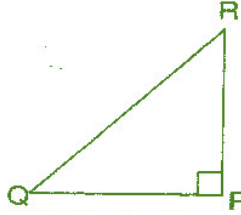
(a) Here, BE is a median in $\triangle ABC$ and $AE = EC$.



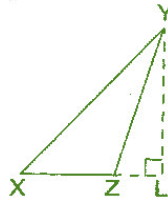
(Chapter – 6) (The Triangle and its Properties)

(Class – VII)

(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 a isosceles triangle can be same.

Answer 3:

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.

