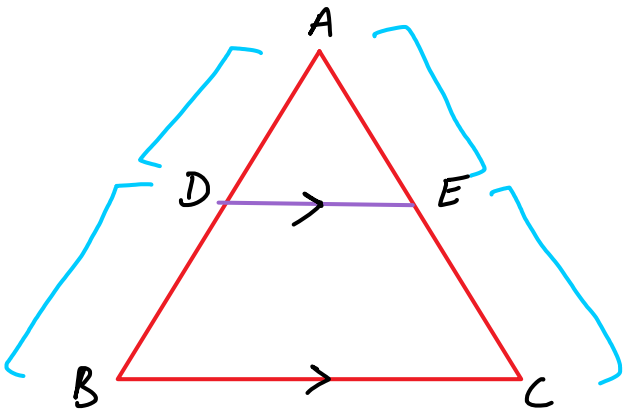
6 Triangles

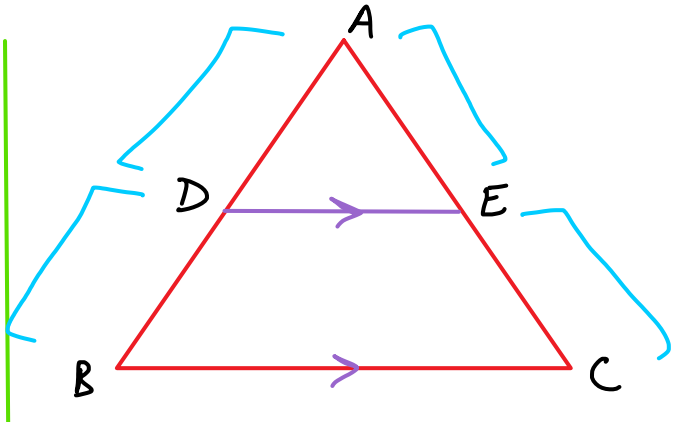
Theorems →
- 6.1 Thales (B.P.T)
- 6.8 Pythagoras
- 6.9 Converse of Pythagoras
- 6.6 Ratio of areas of △'s



Given :- $DE \parallel BC$

To Prove :- $\frac{AD}{DB} = \frac{AE}{EC}$

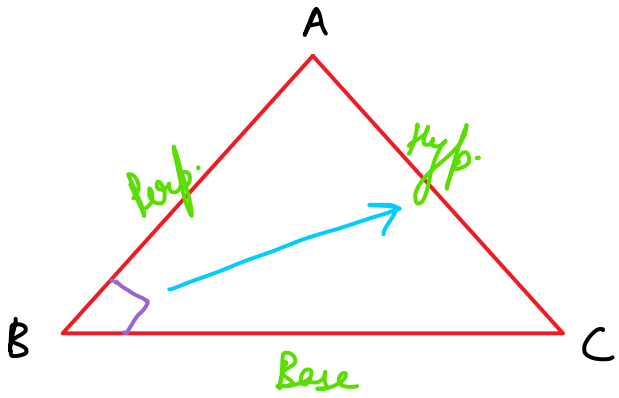
BPT . or Thales



Given :- $\frac{AD}{DB} = \frac{AE}{EC}$

To prove :- $DE \parallel BC$

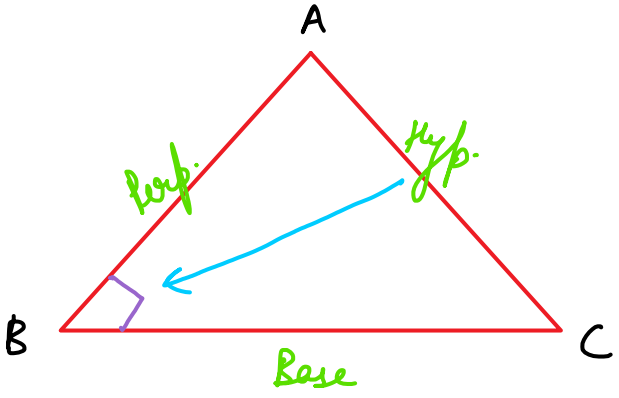
Converse of BPT



Given :- $\angle B$ is right angle

To prove :- $(Hyp)^2 = (Base)^2 + (Perp.)^2$

Pythagoras

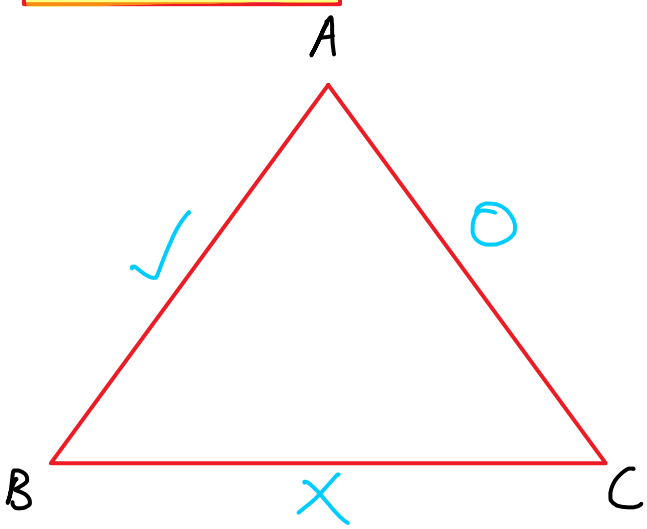


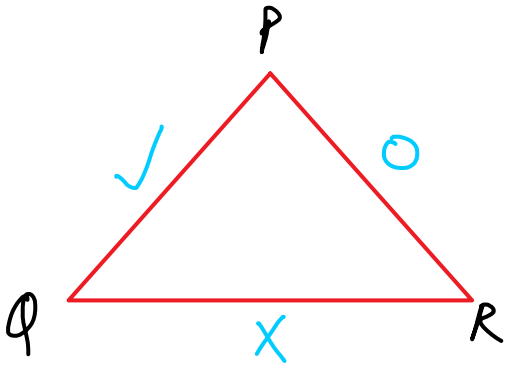
Given :- $AC^2 = AB^2 + BC^2$

To prove :- $\angle B$ is right angle

Converse of Pythagoras

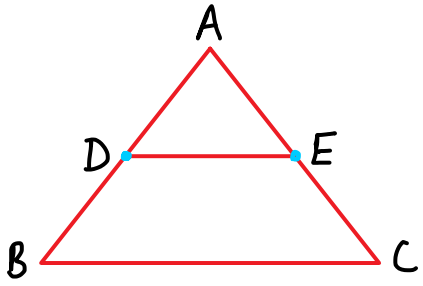
Theorem 6.6





Given:- $\triangle (ABC) \sim \triangle (PQR)$

To prove:- $\frac{ar\,(ABC)}{ar\,(PQR)} = \left(\frac{AB}{PQ}\right)^2 = \left(\frac{BC}{QR}\right)^2 = \left(\frac{AC}{PR}\right)^2$

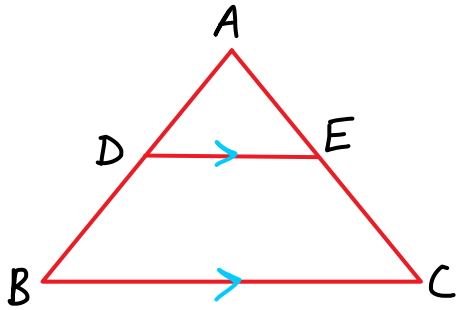


Given :- 2 mid-pt

To prove :- DE || BC

Q8 Mid-pt. Theorem

By (Converse of BPT)



Given :- 1 mid-pt.
DE || BC

To prove :- 2 mid-pt

Q7 Converse of mid-pt Theorem

By (BPT)