Apply the Pythagorean theorem. Find whether each triangle has a right angle.

1) 

2) 

3) 

4) 

5) In triangle XYZ, the sides XY, YZ and XZ measure 12 m, 16 m and 20 m respectively. Prove that XYZ is a right triangle.

6) In triangle PQR, the sides PQ, QR and PR measure 15 cm, 20 cm and 25 cm respectively. Prove that PQR is a right triangle.
Apply the Pythagorean theorem. Find whether each triangle has a right angle.

1) [Diagram of triangle ABC with sides 4 cm, 5 cm, and 3 cm]  
   **right triangle**

2) [Diagram of triangle EFG with sides 8 m, 6 m, and 5 m]  
   **not a right triangle**

3) [Diagram of triangle U VW with sides 7 mm, 11 mm, and 9 mm]  
   **not a right triangle**

4) [Diagram of triangle L MN with sides 12 cm, 15 cm, and 9 cm]  
   **right triangle**

5) In triangle XYZ, the sides XY, YZ and XZ measure 12 m, 16 m and 20 m respectively.  
   Prove that XYZ is a right triangle.  
   
   \[XY^2 = 144 \text{ m}, \ YZ^2 = 256 \text{ m}, \ XZ^2 = 400 \text{ m}\]  
   \[XY^2 + YZ^2 = XZ^2\]  
   
   **XYZ is a right triangle.**

6) In triangle PQR, the sides PQ, QR and PR measure 15 cm, 20 cm and 25 cm respectively.  
   Prove that PQR is a right triangle.  
   
   \[PQ^2 = 225 \text{ cm}, \ QR^2 = 400 \text{ cm}, \ PR^2 = 625 \text{ cm}\]  
   \[PQ^2 + QR^2 = PR^2\]  
   
   **PQR is a right triangle.**