

**Q.1 Multiple Choice Questions 1**

- 1 In  $\triangle ABC$ ,  $\angle A = 60^\circ$ ,  $\angle C = 30^\circ$ ,  $\angle B = 90^\circ$  and  $AC = 6$  cm. Find the length of side  $AB$ .  
a. 3    b. 4    c. 5    d. 6

**Q.2 Answer the following. 1**

- 1 Find the diagonal of a rectangle whose length is 35 cm and breadth is 12 cm.

**Q.3 Answer the following 4**

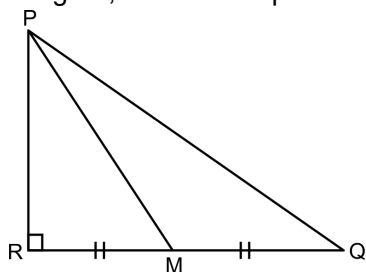
- 1 Find the length of the hypotenuse of a square whose side is 16 cm.  
2 Find the side and perimeter of a square whose diagonal is  $13\sqrt{2}$  cm.

**Q.4 Solve the following (Any One) 3**

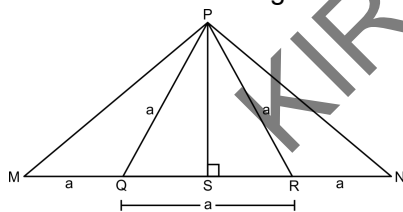
- 1 Prove that : In a right angled triangle, the square of the hypotenuse is equal to the sum of the squares of remaining two sides.  
2 Seg  $AM$  is a median of  $\triangle ABC$ . If  $AB = 22$ ,  $AC = 34$ ,  $BC = 24$ , Find  $AM$ .

**Q.5 Answer the following 8**

- 1 In figure,  $M$  is the midpoint of  $QR$ .  $\angle PRQ = 90^\circ$ . Prove that,  $PQ^2 = 4PM^2 - 3PR^2$

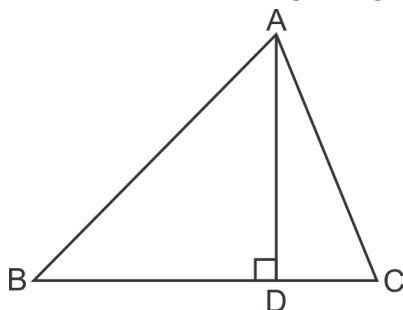


- 2 From the information given in the figure, prove that  $PM = PN = \sqrt{3} \times a$ .



**Q.6 Answer the following (Any One) 3**

- 1 The perpendicular  $AD$  on the base of  $\triangle ABC$  intersects  $BC$  at  $D$  so that  $BD = 3 CD$ .  
Prove that :  $2AB^2 = 2AC^2 + BC^2$



- 2 Pranali and Prasad started walking to the East and to the North respectively, from the same point and at

the same speed. After 2 hours distance between them was  $15\sqrt{2}$  km. Find their speed per hour.

YOUR FLIGHT , OUR WINGS.

KIRAN TUTORIALS