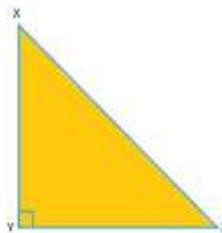


BOARD – ICSE

CLASS –7

TOPIC – PYTHAGORIAN THEOREM

1. The side of the triangle are of length 7.5 m, 4 m, 8.5 m. Is this triangle a right triangle? If so, which side is the hypotenuse?
2. In $\triangle ABC$ right angled at A. if $AB = 10$ m and $BC = 26$ m, then find the length of AC.
3. In $\triangle XYZ$ right angled at Y. find the length of the hypotenuse if the length of the other two sides is 1.6 cm and 6.3 cm.
4. A ladder 8.5 m long rests against a vertical wall with its foot 4 m away from the wall. How high up the wall the ladder reach?
5. The height of two towers is 150 m and 136 m respectively. If the distance between them is 48 m, find the distance between their tops.
6. A tree broke from a point but did not separate. Its top touched the ground at a distance of 24 m from its base. If the point where it broke is at the height of 7 m from the ground, what is the total height of the tree?
7. A ladder 13 m long when set against the wall of house just reaches a window at a height of 12 m from the ground. How far is the lower end of the ladder from the base of the wall?
8. If the square of the hypotenuse of an isosceles right triangle is 128 cm^2 , find the length of each side.
9. Find the perimeter of a rectangle whose length is 150 m and the diagonal is 170 m.
10. A ladder 13 m long is placed on the ground in such a way that it touches the top of a vertical wall 12 m high. Find the distance of the foot of the ladder from the bottom of the wall.
11. The height of two building is 34 m and 29 m respectively. If the distance between the two building is 12 m, find the distance between their tops.
12. In $\triangle XYZ$, $\angle Y = 90^\circ$. If $XY = 3$ cm and $YZ = 4$ cm, find XZ.



13. Two poles, 15 feet and 35 feet high, are 15 feet apart. Find distance between the tops of the poles.