



Year 8 Mathematics

Pythagoras' Theorem Practice Test 1

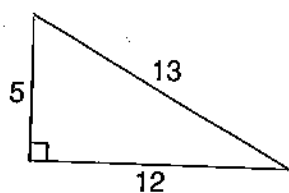
Name _____

1 For the triangles given in (1) to (3) select the statement from A, B or C

A $5^2 + 12^2 = 13^2$

B $(5 + 12)^2 = 13^2$

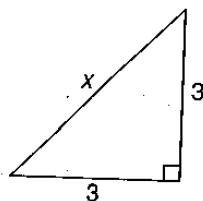
C $13^2 + 5^2 = 12^2$



A $3 + 3 = x$

B $3^2 = 3^2 + x^2$

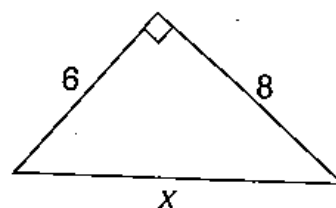
C $(3 + 3)^2 = x^2$



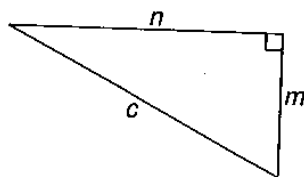
A $8^2 = 6^2 + x^2$

B $x^2 = 6^2 + 8^2$

C $x = 6 + 8$

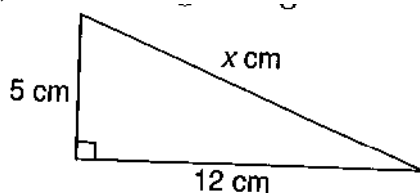


2 Write Pythagoras Theorem for the triangle below

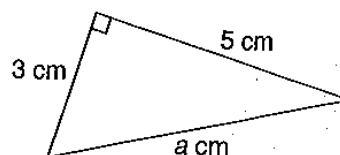


3 Calculate the length of the hypotenuse in each of the following triangles

a)

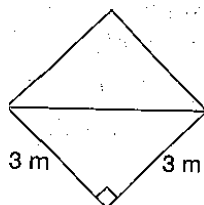


b)

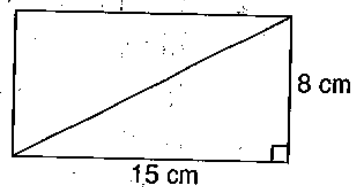


4 Find the lengths of the diagonals in the shapes below

a)

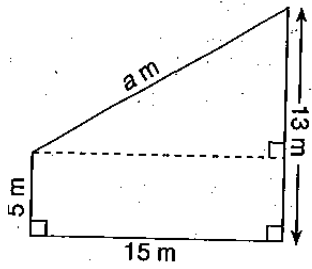


b)

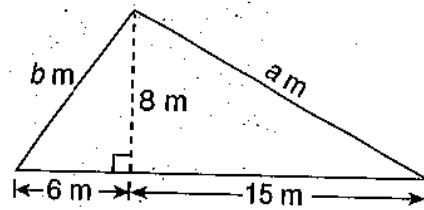


5 Find the value of the pronumerals in the shapes below

a)

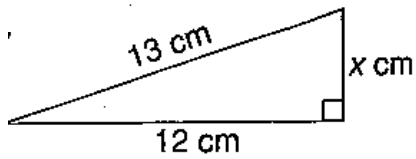


b)

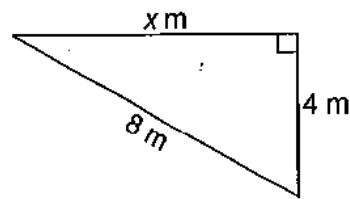


6 Find the value of x each of the following

a)

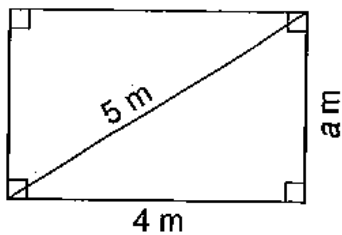


b)

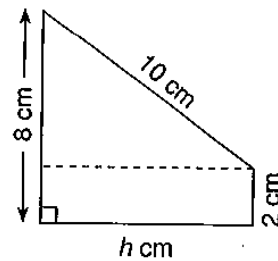


7 Find the value of the pronumerals in the shapes below

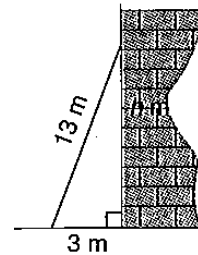
a)



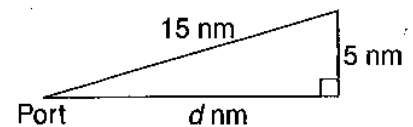
b)



8 A ladder that is 13 m long is placed so that its foot is 3 m from the base of a vertical wall. How far does the ladder reach up the wall to 1 d.p?



9 A ship is 15 nautical miles from port. After sailing 5 nautical miles due south it is directly east of the port. How far is the ship then from port to 1 d.p?



10 Can 2, 3 and 4 be the side lengths of a right angled triangle