

Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: X

Date:

Name:

ID No.....

Pythagoras Theorem and its Converse

Assignment

1. State and prove the Pythagoras Theorem.

Sol.

2. State and prove the converse of Pythagoras Theorem.

Sol.

3. A 5 m long ladder is placed leaning forward on a vertical wall, such that it reaches the wall at a point 4 m high. If the foot of the ladder is moved 1.6 m towards the wall, then find the distance by which the top of the ladder would slide upwards on the wall.

Sol.

4. For going to a city B from city A, there is a route via city C such that $AC \perp CB$, $AC = 2x$ km and $CB = 2(x + 7)$ km. It is proposed to construct a 26 km highway which directly connects the two cities, A and B. Find how much distance will be saved in reaching city B from city A after the construction of the highway.

Sol.
