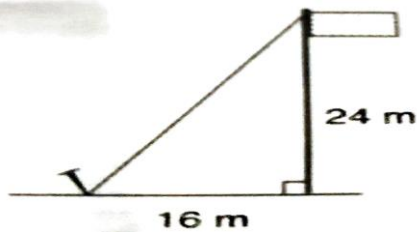**RATU NAVULA COLLEGE**

**Y11 MATHEMATICS LIFESKILLS
WORKSHEET 7 QP**

1. A flagpole is held upright by four wires. Each wire is fastened to the pole, 24m above the ground, and to pegs in the ground 16m from the base of the pole. How long is each guy wire?

2. A rugby goal kicker places the ball, 18m to the right of the center of the goal posts and 34m out from the goal-line. How far from the centre of the goal posts to the ball?
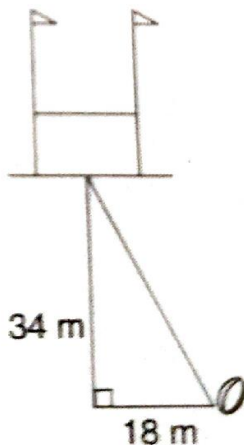

3. The dimensions of the roof and ceiling in a house is shown.
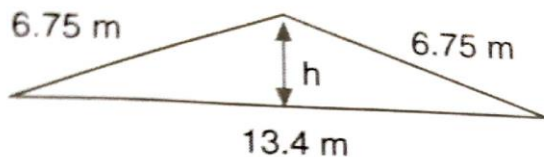
Calculate the distance between the top of the roof and the ceiling, *h*.

4. Cama and Manasa were laying a footpath for their new home, and they wanted to make sure that they had right angle at point A. Cama placed a peg in the ground at B, 4m from A. He tied a 10m length of twine to the peg. Manasa held a tape at point A and Cama held the free end of the twine. At what point on the tape should the twine meet the tape to get a right angle at A?
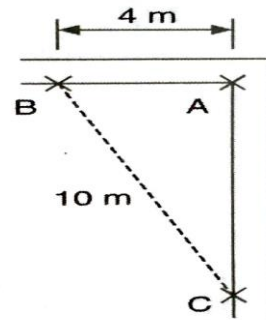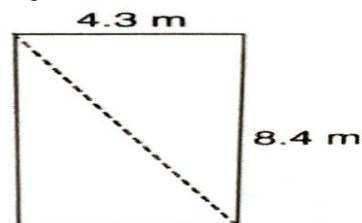

5. Susan has a suitcase with dimensions 90cm by 60cm by 30cm. She has an umbrella 1.05m long. Can she fit her umbrella in the bottom of her suitcase?
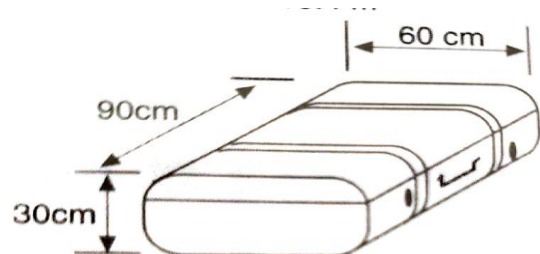
6. In the diagram, AB is the sloping roof of a shed. The front A is 3m high, the back B is 6m high. The width of the shed is 6.5m. What length (AB) of roofing iron, to the nearest cm, is needed for the roof?
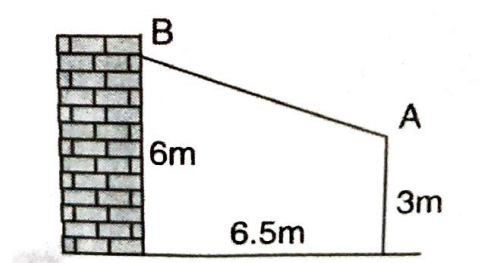
7. A builder laying the foundations of a garage wants to be sure that she has the walls of the garage at right angles. How long should the diagonal be so that the walls are at right angles?

THE END