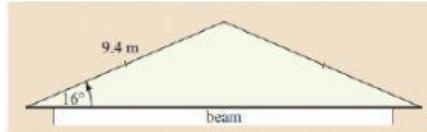


PROBLEM SOLVING IN TRIGONOMETRY

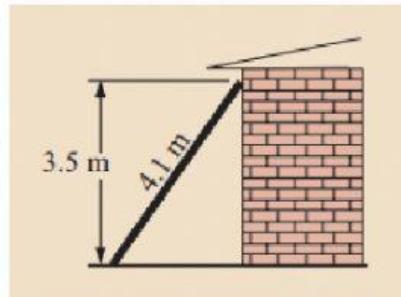


Solve these problems.

1. Determine the length of the roofing beam required to support a roof of pitch 16° as shown alongside.



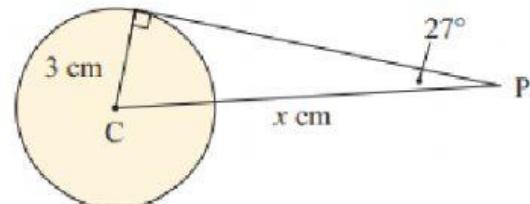
2. A ladder 4.1m in length rests against a vertical wall. And reaches 3.5m up from ground level. Find:
 - a. The angle of the ladder which makes the ground.
 - b. The distance from the foot of the ladder to the Wall using trigonometry.



a.

b.

3. The angle between a tangent from a point P to a circle and the line from P to the centre of the circle is 27° . Determine the length of the line from P to the centre of the circle if the radius is 3cm.



4. From a point A which is 30m from the base of the building B, the angle of elevation to the top of the building C is 56° , and to the flag pole CD is 60° .
Find the length of the flag pole.

