

1. Calculate the following Cosine ratios:

$$\cos 5^\circ = \underline{\hspace{2cm}}$$

$$\cos 11^\circ = \underline{\hspace{2cm}}$$

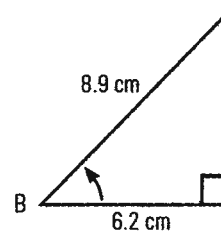
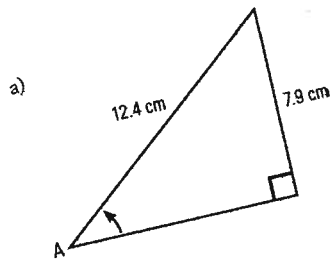
$$\cos 26^\circ = \underline{\hspace{2cm}}$$

$$\cos 48^\circ = \underline{\hspace{2cm}}$$

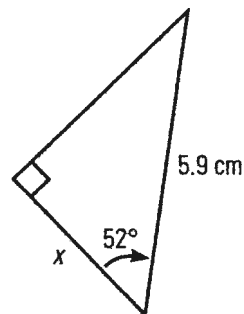
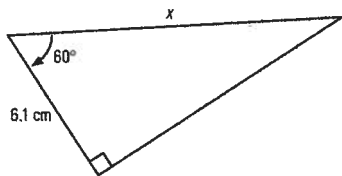
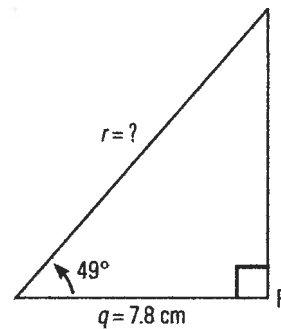
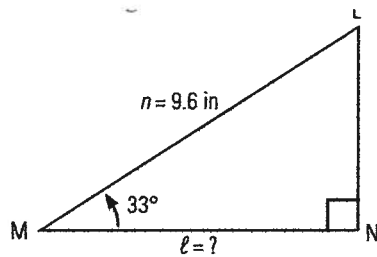
$$\cos 53^\circ = \underline{\hspace{2cm}}$$

$$\cos 89^\circ = \underline{\hspace{2cm}}$$

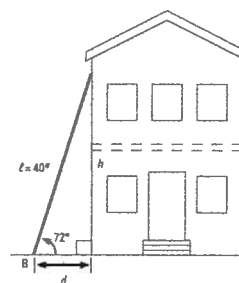
2. Find the Cosine ratio of the following diagrams. You may need to use Pythagoras!!!



3. Find the missing sides of the triangles below



4. How far from the base of a house is a 40-foot ladder if the angle of elevation is  $72^\circ$ ?



5. How far from the base of a flagpole must a guy wire be fixed if the wire is 12 metres long and it makes an angle of  $63^\circ$  with the ground?

6. Reba walks 25 yards across the diagonal of a rectangular field. If the angle between the width and the diagonal is  $67^\circ$ , how wide is the field?

7. What height is a pole, and how far away from it is a cable attached to the ground, if the angle of elevation is  $25^\circ$  and the cable is 18 m long? You must not use Pythagoras's Theorem to solve for any sides, only Trig ratios.

