DAY 1&2 – Primary Trig Ratios

1. Label the sides of the triangle as *opposite*, *adjacent* and *hypotenuse*.

a.

b.

c.

2. Evaluate. Round answers to 4 decimal places.

a. sin 30°

b. cos 45°

c. tan 60°

3. Find the measure of each angle to the nearest degree. Record solution properly.

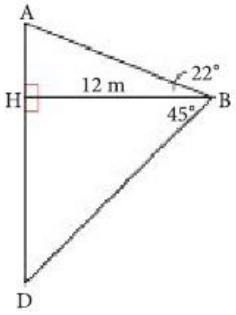
a. sin A = 0.2345

b. cos B = 0.8765

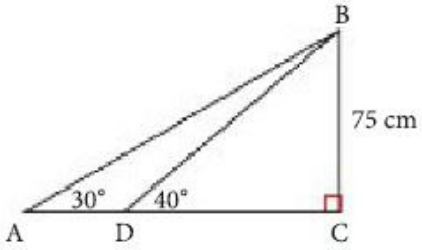
c. tanC = 1.2345

4. Find the measure AD in each of the following triangles.

a.

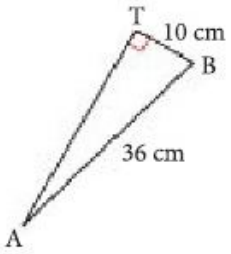


b.

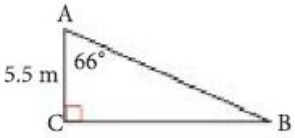


5. Solve each triangle (find all missing angles and sides).

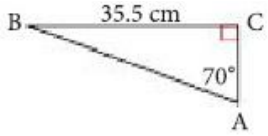
a.



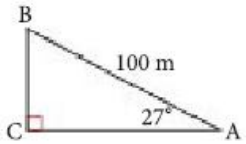
b.



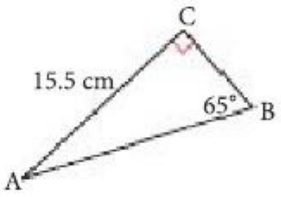
c.



d.



e.



6. A monument casts a shadow 13 m long. The sun's rays form an angle of 63° with the ground. Calculate the height of the monument to on decimal place.

7. A ladder leans against a wall forming a 25° angle with the wall. If the ladder reaches 2.8 m up the wall, how long is the ladder?

8. Jasmine is planning to climb up a cliff face. She sill be attached to a rope anchored to the top of the cliff. To find out how much rope she will need, she uses a clinometer to check the height of the cliff. She stands 500 m from the base of the cliff and measures a 73° angle to the top. How high is the cliff?

9. A carpenter leans a 4 m ladder against a wall. It reaches 3.5 m up the wall. What is the angle the ladder makes with the wall?

10. A rocket is launched at an angle of 80° to the ground and travels in a straight line. What is the rocket's altitude when it has traveled for 15 km?