Name:______________________________ Block:______ Date:_____________

AWM10 **Practice Test**

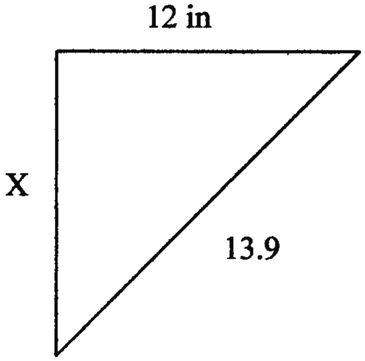
Ch. 7 Practice Test

(38marks)

1. A right triangle has sides a = 6 cm, b = 5 cm, what is the length of the hypotenuse?

2. A right triangle has side lengths of x = 3, y = 4, z = 5. Is this a right triangle? Prove it.

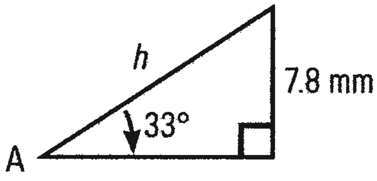
3. Find the length of the missing side on this triangle.



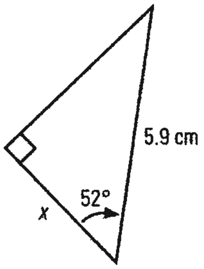
4. The approximate value of the cos of 125^0 is

6. The decimal 0.8090 represents

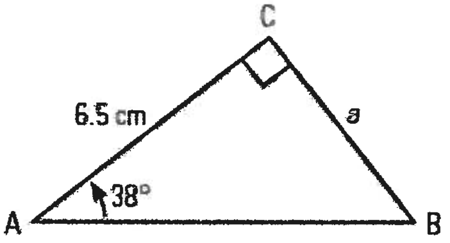
7. Find the length of the missing side of this triangle:



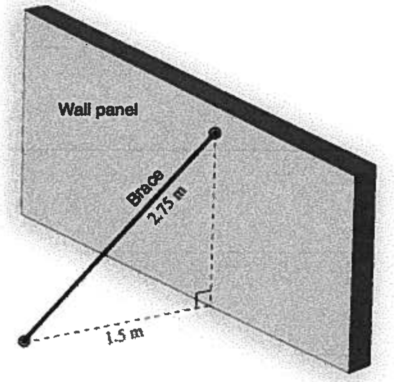
8. Find the length of the missing side of this triangle:



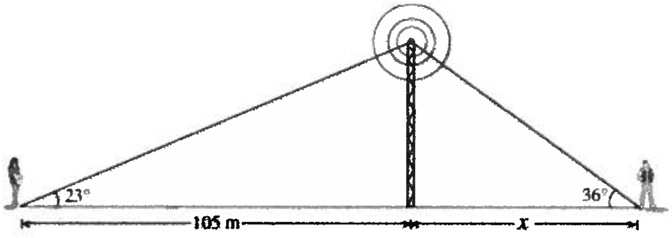
9. Find the length of the missing side below



10. The brace is 2.75 m long and must be anchored 1.5 m from the base of the wall. Solve for the missing side.



12. Janelle and Mandeep are standing on opposite sides of a cell phone tower. Janelle is standing 105 m from the tower. Her angle of elevation to the tower is 23°. Mandeep's angle of elevation to the tower is 36°. What is the height of the tower?



13. Bob is standing on a surveyors mark. He measures a 54° angle of elevation to the top of a building 72 m tall. Approximately how far away from the base of the building is the surveyors mark?

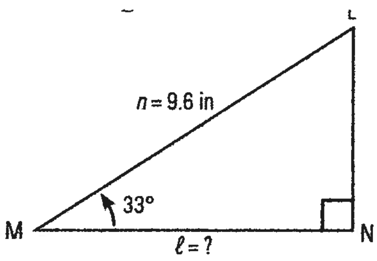
14. Which statement is always true about the hypotenuse side in a right triangle?

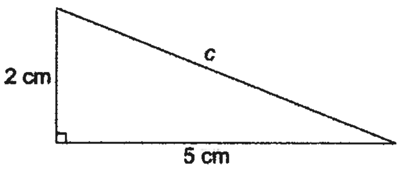
a) The hypotenuse side is opposite the right angle.
b) The hypotenuse side is across from the given angle.
c) The hypotenuse side is the shortest side in the right triangle.
d) The opposite side meets the hypotenuse at the given angle.

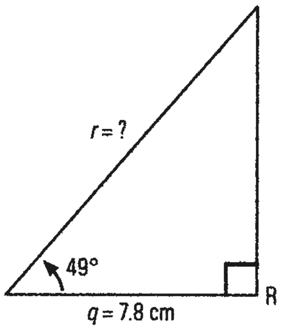
15. Mani left his house and walked 1.3 km due east and then 1.6 km due south. What is the straight line distance between Mani and his house?

****** Written Section- Please show all your work for full marks******

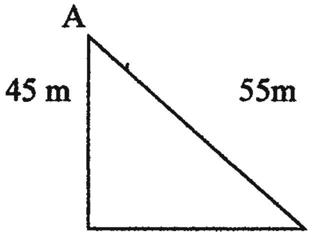
1. Find all of the missing sides of the following triangles. (6 marks)

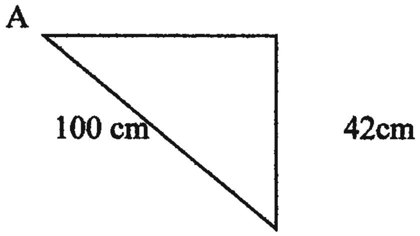

L
n = 9.6 in
33°
M
ℓ = ?
N





2. Find the missing angles in the triangles below: (4 marks)

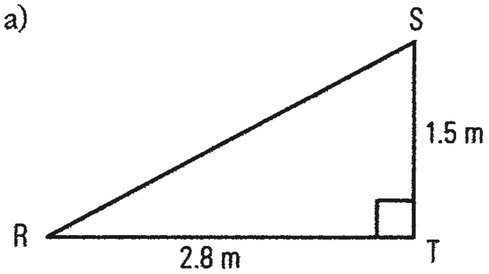



A
100 cm
42cm

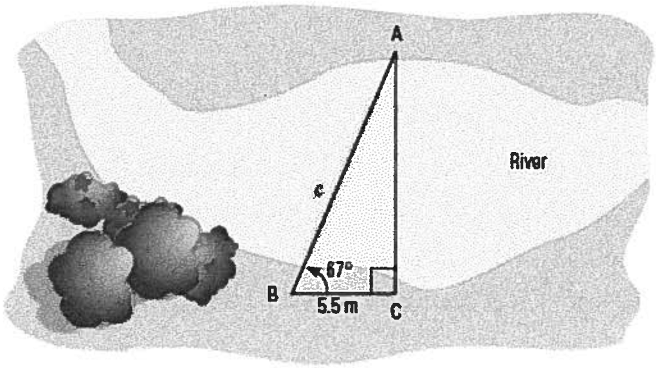
3. What is the angle of elevation if a ramp with a height of 2 meter and a horizontal length of 3 meters? (3 marks)

4. Solve the following triangle (find all sides and angles) (4 marks)

a)



5. A tree casts a shadow that is 12 meters long. If the angle of elevation to the top of the tree from the ground at the end of the shadow is 60°, how high is the tree? (3 marks)

6. Arul needs to string a bridge line across the river from A to C. What must the length of the bridge line be, given his measurements? (3 marks)