

Name: \_\_\_\_\_ Nos: \_\_\_\_\_ Grade: \_\_\_\_\_ LESSON QUIZ 2

Trigonometric Ratios: Learn to Angle of Elevation & Depression

69

Guidance: 1. Read each question carefully before you begin answering it.

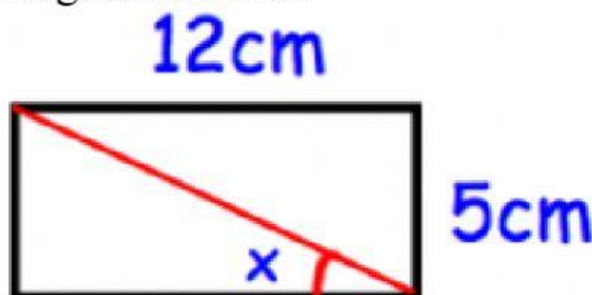
2. Check your answers seem right from the table given and then drag it appropriately.

3. Always show your workings. 4. In each question, draw a diagram unless it has been given.

1. A ladder is placed against a wall. The base of the ladder is 4 ft from the bottom of the wall. The angle between the ladder and the ground is  $80^\circ$ . What is the length of the ladder?

Ans: \_\_\_\_\_

2. A rectangle is 12cm long and 5cm wide. Find the size of the angle marked x.



Ans: \_\_\_\_\_

3. (a) Find the length of AC. Ans: \_\_\_\_\_

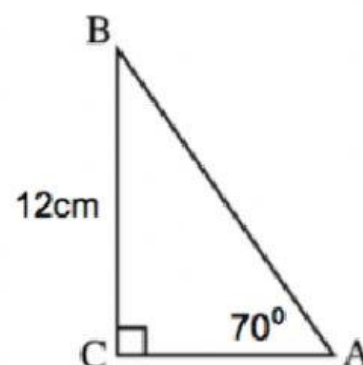
- (b) Find the length of AB. Ans: \_\_\_\_\_

- (c) Find the perimeter of triangle ABC.

Ans: \_\_\_\_\_

- (d) Find the area of triangle ABC.

Ans: \_\_\_\_\_



4. Two hikers are 200 meters away from the base of a radio tower. The measurement of the angle of elevation to the top of the towers is  $42^\circ$ . How high is the tower? Ans: \_\_\_\_\_

Drag your answers appropriately for questions 1 - 4 from the table below:

12.77	26.2	23.04	18.1	29.14	22.62	4.37
-------	------	-------	------	-------	-------	------

5. A 20 – foot ladder leans against a building. It forms an angle with the building  $18^{\circ}$ . How far is the foot of the ladder from the base of the building? **Ans:** \_\_\_\_\_

6. A top of a lighthouse is 140 meters above the sea level. From the top of the lighthouse, the measurement of the angle of depression of a boat at sea is  $44^{\circ}$ . Find the distance of the boat from the foot of the lighthouse.

**Ans:** \_\_\_\_\_

7. A man 1.75m tall, standing 30m away from a tree, found that the angle of elevation of the top of the tree was  $30^{\circ}$ . Find the height of the tree. **Ans:** \_\_\_\_\_

8. An observer 28m away observes that the angle of elevation of a building is  $65^{\circ}$ .

a. How tall is the building? **Ans:** \_\_\_\_\_

b. How far is the observer from the top of the building.

**Ans:** \_\_\_\_\_

Drag your answers appropriately for questions 5 – 8 from the table below:

66.3	60.1	19.02	19.07	194.6
------	------	-------	-------	-------

Click on 'finished' below then 'check my answers' well then take photos of both your score and workings. Upload via class point or Line ID - gpower11. Thanks!!!

IG: amb\_ojo\_oluwole\_godspower