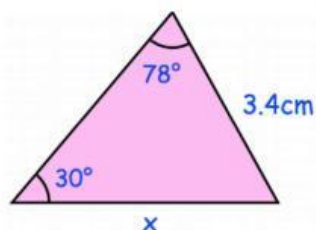


# Warming Up Activity: Solving trigonometry problem and sines rules

## Multiple Choice

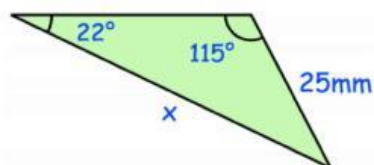
Identify the choice that best completes the statement or answers the question.

1. Find the missing side length  $x$ .



- a. 6.65 cm
- b. 5.66 cm
- c. 1.74 cm
- d. 7.14 cm

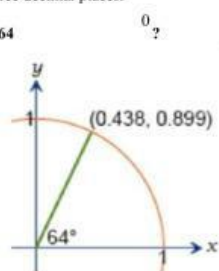
2. Find the missing side length  $x$ .



- a. 60.5 mm
- b. 30.1 mm
- c. 10.3 mm
- d. 58.1 mm

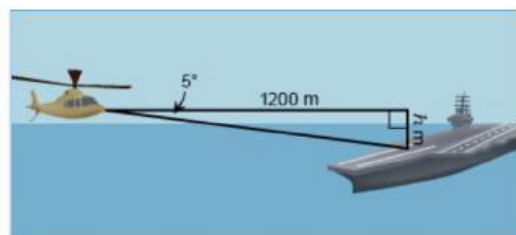
3. The diagram shows the coordinates of the point on the unit circle correct to three decimal places.

the diagram, what is  $\sin 64^\circ$ ?



- a. 0.438
- b. 0.899
- c. 1
- d. -1

4. A helicopter rose  $h$  m from the deck of an aircraft carrier and travelled 1200 m in a straight line. The angle of depression of the ship from the helicopter was then  $5^\circ$ .

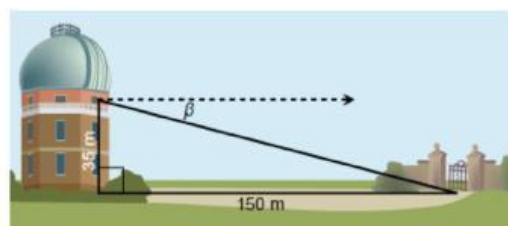


Calculate  $h$ , the height risen, to the nearest metre.

(You are allowed to use calculator to solve this question)

- a. 105
- b. 104
- c. 100
- d. 94

5. An observatory window is 35 m above the ground. The front gate of a property can be seen through the window and is 150 m away along the flat path. Calculate the angle of depression from the observatory to the gate to the nearest degree.



(You are allowed to use calculator to solve this question)

- a.  $13^\circ$
- b.  $14^\circ$
- c.  $76^\circ$
- d.  $77^\circ$