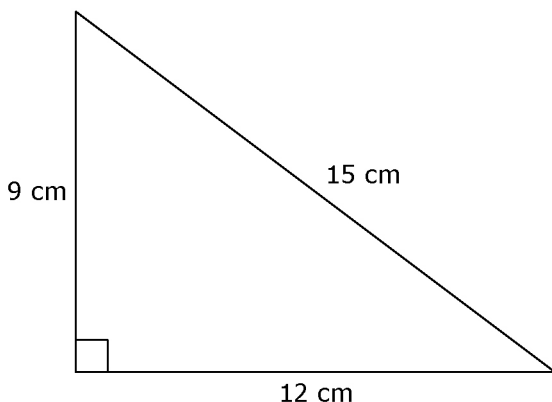


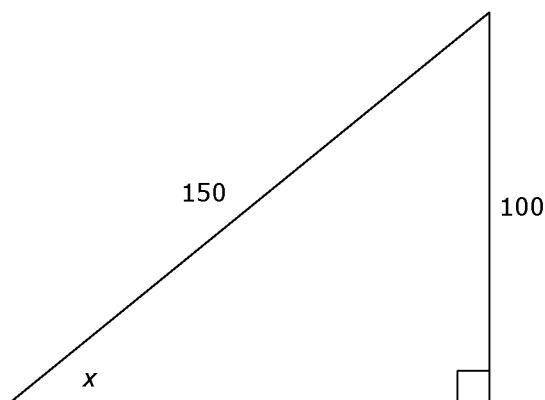
Chapter 7 Test

For #1 to #6, select the best answer.

1. Devon wants to draw a triangle similar to the one shown. Which set of dimensions could he use for the similar triangle?

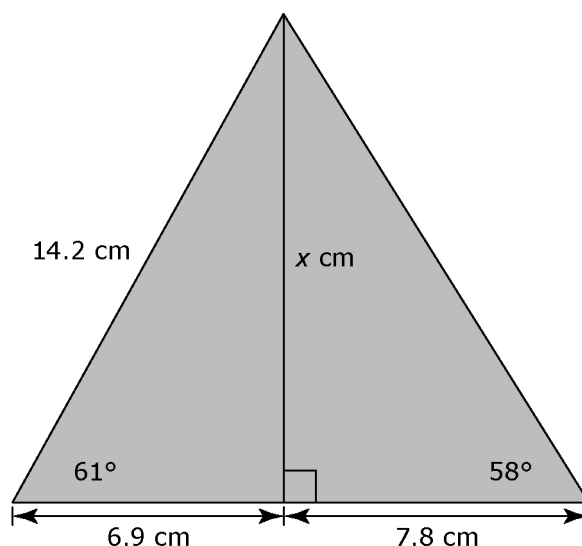


- A** 3 cm, 5 cm, 5 cm
B 3 cm, 4 cm, 5 cm
C 9 cm, 13 cm, 16 cm
D 24 cm, 22.5 cm, 33 cm
2. What is the measure of the unknown angle, to the nearest degree?



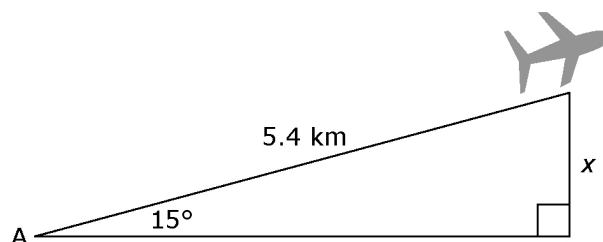
- A** 34°
B 42°
C 47°
D 56°

3. What is the value of x , to the nearest centimetre?



- A** 4.1 cm
B 7.4 cm
C 11.3 cm
D 12.5 cm

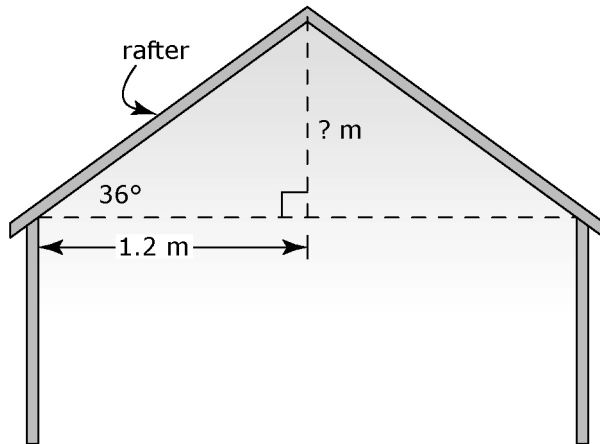
4. An airplane takes off and climbs at a steady rate at an angle of 15° with the ground. What is the height of the plane when the direct distance from the plane to the runway is 5.4 km?



- A** 1080 m
B 1141 m
C 2555 m
D 5282 m

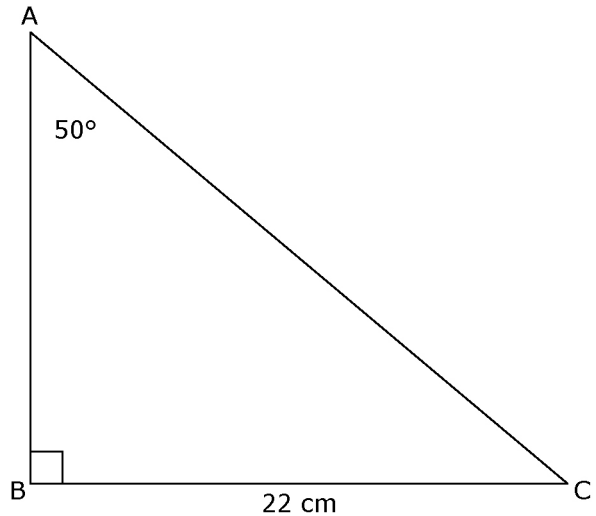


5. According to the diagram, what is the distance between the peak of the roof and the top of the walls?



- A** 0.87 m
B 0.71 m
C 0.97 m
D 1.2 m
6. A map of a school in a new student welcome kit measures 8.5 in. \times 11 in. If the scale of the map is 1 in. = 200 ft, what are the maximum dimensions of the school?
- A** 1700 ft \times 2200 ft
B 850 ft \times 110 ft
C 200 ft \times 1100 ft
D 850 ft \times 1100 ft

7. Determine the missing side lengths and angle measure in the triangle. Give each side length to the nearest tenth of a unit and the angle to the nearest degree.



8. A ladder that is 20 ft long is leaning against a two-storey house. The bottom of the ladder is 5 ft from the base of the house.
- a)** How high up the side of the house does the ladder reach?
b) What angle does the ladder make with the ground?
9. A kite string 100 ft long makes an angle of 35 degrees with the ground. Determine the height of the kite.

