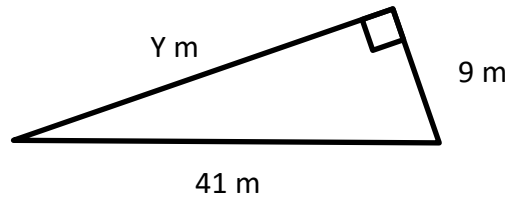
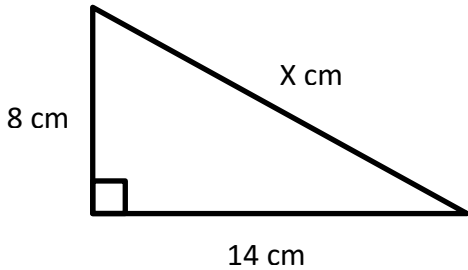


PYTHAGORAS' THEOREM

Name:

BAM Indicator: Apply Pythagoras' theorem in two dimensions

1. Calculate the value of the missing side lengths X and Y.

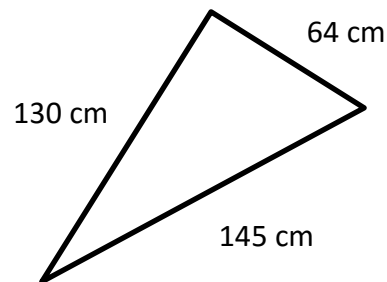


X = _____ cm

Y = _____ cm

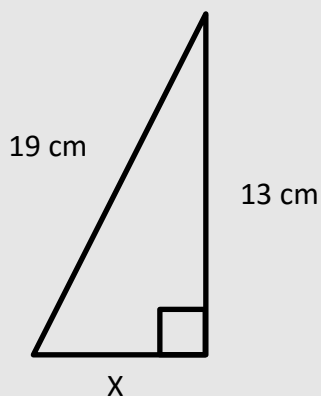
2. Roger thinks that this is a right-angled triangle. Annabel disagrees.

Who is correct? Explain your answer.



3. Lizzie thinks that she should have been given full marks for her answer to this question in her mathematics test. Explain the error she has made.

Use Pythagoras' theorem to calculate the value of X to two decimal places



$$a^2 + b^2 = c^2$$

$$19^2 + 13^2 = c^2$$

$$361 + 169 = c^2$$

$$c^2 = 530$$

$$c = \sqrt{530}$$

$$c = 23.02 \text{ cm to 2 d. p.}$$

F

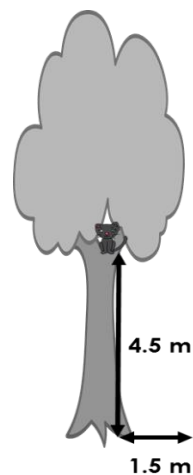
R

M

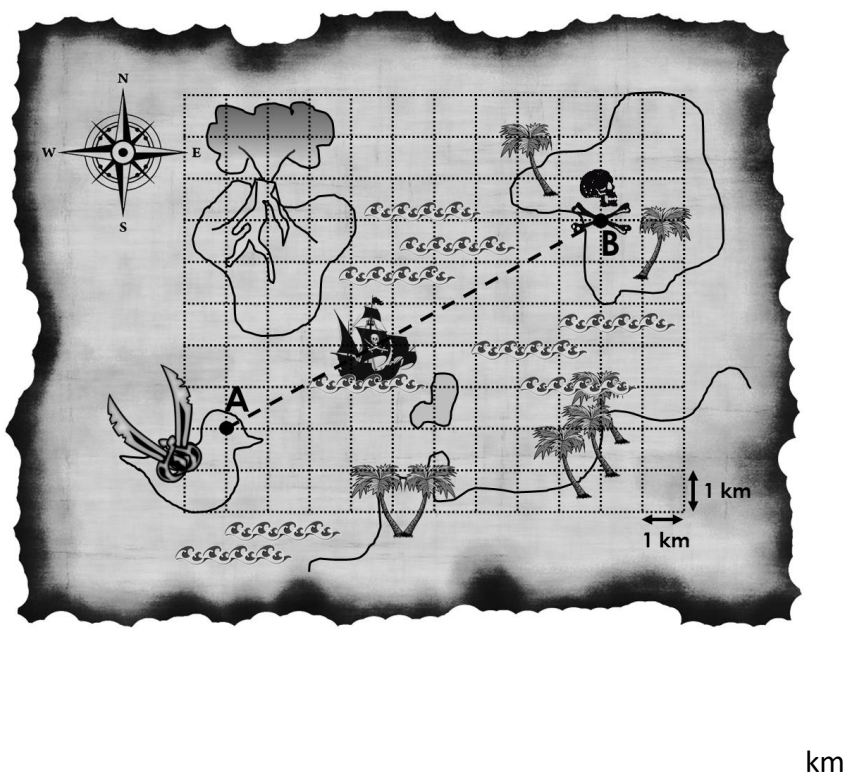
4. Rohan's cat is stuck 4.5 metres above the ground in a tree. He wants to use his 5 metre long ladder to rescue the cat.

The safety instructions on the ladder state that the base of the ladder must be a minimum of 1.5 metres from the tree.

Will the ladder reach the cat?



5. Captain Pythag has found a treasure map. He decides to travel in a straight line to get from his location at A to the treasure at B. Use the information on the map to calculate the distance he will travel. Give your answer to one decimal place.



Overall, I think my success level is:

Low High

F = Fluency R = Reasoning P = Problem-solving A = Application M = Misconception

Q	PYTHAGORAS' THEOREM	😊	☹️
	I can calculate the calculate the hypotenuse of a right angle triangle		
	I can calculate the calculate the shorter side of a right angle triangle		
	I can use Pythagoras' theorem to prove whether a triangle has a right angle		
	I can use Pythagoras' theorem to find the distance between points		
Improvements I could make:			
Mathematical presentation	Method	Accuracy	Units