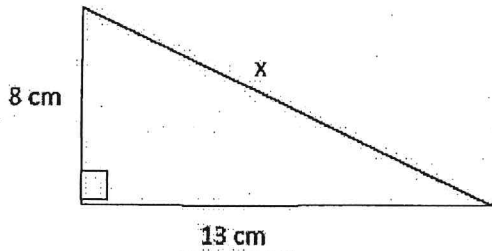# Practice: The Pythagorean Theorem | MFM1P

*Remember to show all the required steps, round answers to 2 decimal places if necessary and always include units!
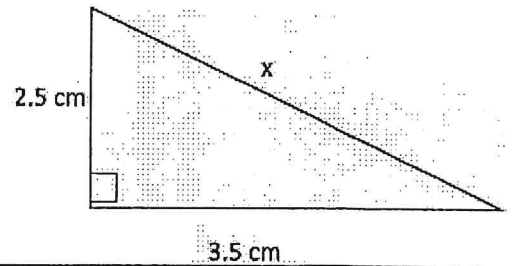
1. Calculate the hypotenuse.

a)

8 cm, x, 13 cm

Formula	
Sub in	
Simplify	
Answer (with units)	

b)

2.5 cm, x, 3.5 cm

Formula	
Sub in	
Simplify	
Answer (with units)	

2. Calculate the leg.

a)

65 cm, 100 cm, x

| Formula	
Sub in	
Simplify	
Answer (with units)	

b)

20 cm, x, 15 cm
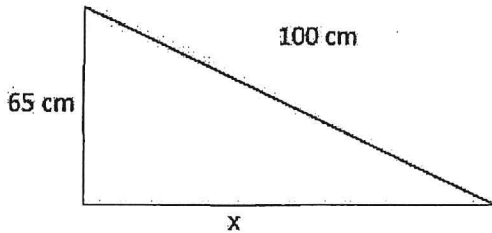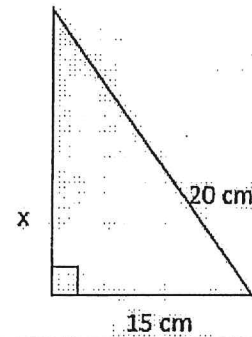
Formula	
Sub in	
Simplify	
Answer (with units)	

With the questions below, draw and label the right angle triangle that represents the scenario and then calculate the answer to the question. Remember your closing statement!

1. To walk to school George must walk 100m east and then 200m north around a huge conservation area. The town has decided to build a sidewalk that cuts diagonally through the middle of the park. How long will the new sidewalk be?
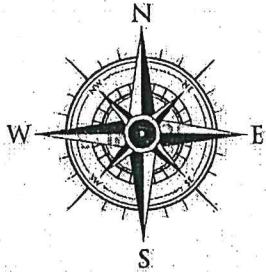
2. A 6.2m long ladder is placed up against the side of a building. The base of the ladder is 1.5m from the wall. How high up the building does the ladder reach?

3. Mr. Drippy carries a brief case that is 55cm wide and 38cm tall. He's worried that it might rain today so he would like to bring his umbrella to work with him. His umbrella is 60cm long. Will it fit in his brief case? (Hint: Will it fit diagonally?)
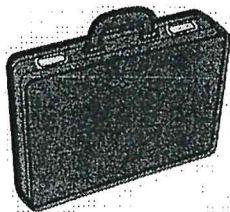
4. The leaning tower of Pisa is approximately 55.8 m tall. A fly is sitting on the top looking down at the ground and with his amazing bug-sense determine that he is exactly 45m above the ground and can see himself in little itsy-bitsy puddle directly below him. How far from the towers base is the puddle?