

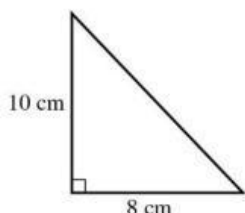
Maths 22101
Pythagoras: Unit Test 1
40 minutes

Nick name: Class: M2/..... N^o:.....

Section A – Multiple Choice

Circle the correct answer

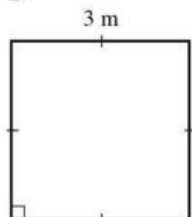
1.



What is the length of the hypotenuse in the figure?

- A** 17.4 cm
- B** 15.1 cm
- C** 13.2 cm
- D** 12.8 cm
- E** 11.5 cm

2.



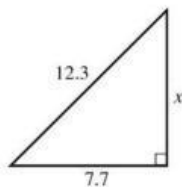
How long is the diagonal of this square?

- A** 3.2 m
- B** 4.2 m
- C** 5.9 m
- D** 6.1 m
- E** 8.5 m

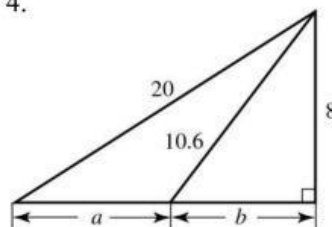
3.

The value of x correct to 2 decimal places is:

- A** 9.59
- B** 10.32
- C** 12.16
- D** 13.73
- E** 14.51



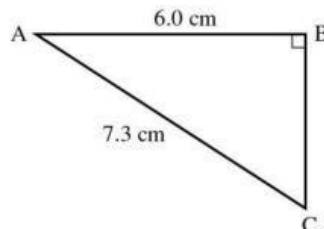
4.



The value of b is:

- A** 6.95
- B** 8.4
- C** 9.31
- D** 10.2
- E** 11.55

5. Triangle ABC is shown below. Which of the following is the closest to the perimeter of triangle ABC?



- A** 21.0 cm
- B** 17.5 cm
- C** 16.3 cm
- D** 12.6 cm
- E** 9.4 cm

6.



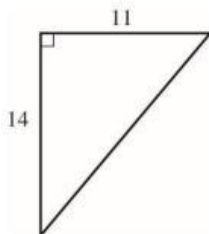
A ladder 3 m long leans against a wall. The foot of the ladder is 80 cm from the wall. The distance the ladder reaches up the wall is:

- A 89 cm
- B 103 cm
- C 187 cm
- D 253 cm
- E 289 cm

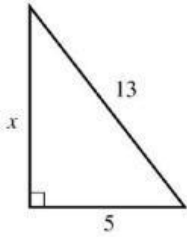
7. Pythagoras' theorem only applies to right-angled triangles. True False
8. A triangle with side lengths 13cm, 21cm & 16cm contains a right angle? True False
9. If the length of the hypotenuse is 22 mm and one side is 13 mm, then the length of the other side is 19 mm. True False
10. A man walks East 6meter. Then he walks North 4m. After that he goes North another 4 meters. How far is he from his starting point?
- A. 9 meters
 - B. 10meters
 - C. 11meters
 - D. 12 meters

Section B – Skills Section

1. Find the length of the hypotenuse in each of the following right-angled triangle, correct to 2 decimal places.



2. Find the value of the pronumeral.



3. What is the length of a diagonal of a rectangle 9 m long and 5 m wide? Give your answer in metres correct to 2 decimal places

4. An isosceles triangle has sloping equal sides 9 mm long, and a base equal to 6 mm. Calculate the perpendicular height of the triangle, to the nearest mm.

5. A ladder 12 m long leans against a wall. The foot of the ladder is 190 cm from the wall. How far up the wall does the ladder reach? Give your answer in cm, rounded to 2 decimal places