



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



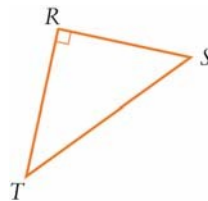
SUBJECT :Algebra and Geometry
Marks:15

CLASS 8
Work sheet 9
PYTHAGORAS THEOREM

Date:16.4.2020

Answer all the following questions(1×15=15)

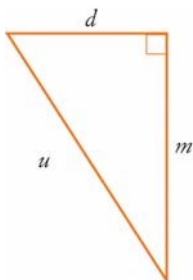
- 1 Which side of this triangle is the hypotenuse?



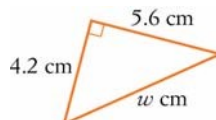
- A** RS **B** TR
C ST **D** RT

- 2 . Which is the correct Pythagoras' theorem for this triangle?

- A** $d^2 = m^2 - u^2$ **B** $d^2 = m^2 + u^2$
C $m^2 = d^2 + u^2$ **D** $u^2 = m^2 + d^2$



- 3 Find w .



- A** 3.70 **B** 9.8
C 7 **D** 1.4

4 Pythagoras was a mathematician from which ancient civilisation?

A Rome B Babylonia

C Greece D Egypt

5 If $r^2 = 10^2 + 4^2$, what is the value of r ?

A 196

B

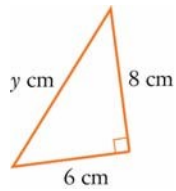
10.77

C 9.17

D

116

6. Find y



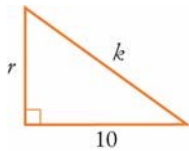
A 24

B 10

C 17

D 6

7. Which is the correct Pythagoras' theorem for this triangle?



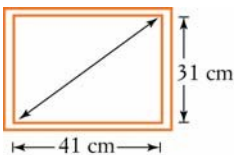
A $r^2 = 10^2 + k^2$

B $10^2 = r^2 - k^2$

C $r^2 = k^2 - 10^2$

D $k^2 = r^2 - 10^2$

8. A TV screen is 41 cm long and 31 cm high. The length of its diagonal is closest to:



A 49 cm

B 51 cm

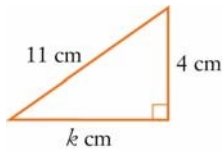
C 54 cm

D 48 cm

9. Which one of these is a Pythagorean triad?

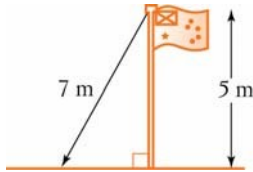
- A** (8, 15, 17) **B** (6, 10, 16)
C (18, 21, 25) **D** (7, 12, 13)

10. Find k .



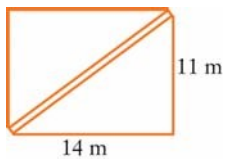
- A** 2.65 **B** 8
C 10.25 **D** 11.70

11. A flagpole of height 5 metres is tied to the ground by a 7 metre cable. How far from the base of the flagpole is the cable tied?



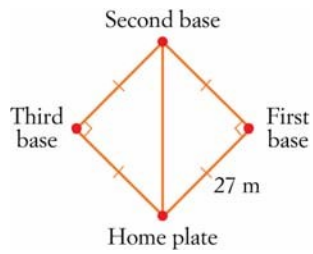
- A** 8.60 m **B** 4 m
C 1.41 m **D** 4.90 m

12. Find the length of the path through the park.



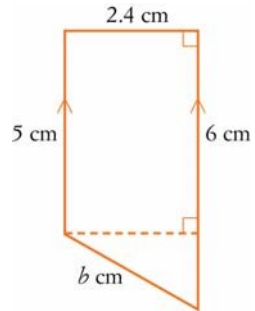
- B** 77 m **B** 17.80 m
C 12.41 m **D** 25 m

13. A baseball field is a square with a side length of 27 metres. What is the distance between the home plate and second base?



- A** 7.35 m **B** 52 m
C 40.50 m **D** 38.18 m

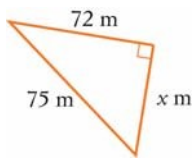
14. Find b .



- C** 8.17 **B** 3.32
C 2.60 **D** 2.18

15.

Find x .



- A** 21 **B** 3
C 15 **D** 18

