



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Algebra Geometry

Class: 7

Date: 28. 04.20

Duration: 40 min

Worksheet Solution -14

Full Marks: 15

TRIANGLES

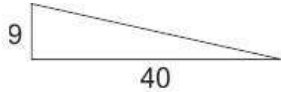
Choose the Correct options:

- The lengths of sides of triangle are x cm, $(x + 1)$ cm and $(x + 2)$ cm, the value of x when triangle is right angled is
 - 5cm
 - 4cm
 - 3cm**
 - 6cm
- A triangle whose sides are 15cm, 36cm, and 39cm is
 - Right angled**
 - Equilateral
 - isosceles
 - none of above
- In a triangle with sides a, b and c , if $a^2 = b^2 + c^2$, then angle facing a is
 - acute angle
 - right angle**
 - obtuse angle
 - none of above
- If 6, 8 and 10 form a Pythagorean triplet then what is the hypotenuse?
 - 6
 - 8
 - 12
 - 10**
- Each side of square field ABCD is 50m long, the length of diagonal field is
 - 70.7m**
 - 50.5m
 - 23m
 - 45m
- What is the Pythagorean Theorem?
 - $a^2 \cdot b^2 = c^2$
 - $c^2 + a^2 = b^2$
 - $(a + b)^2 = c^2$
 - $c^2 = a^2 + b^2$**
- Which of the listed side lengths CAN be sides of a right triangle?
 - 7, 8, 9
 - 6, 7, 8
 - 5, 6, 7
 - 3, 4, 5**

8. Which of the listed sides CAN be sides of a right triangle?

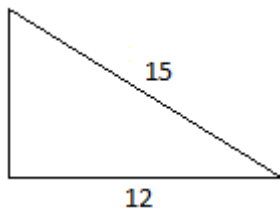
- A. 6in, 12in, 13in
- B. 19in, 21in, 29in
- C. 15in, 20in, 24in
- D. 10in, 24in, 26in**

9. Calculate the length of the hypotenuse.



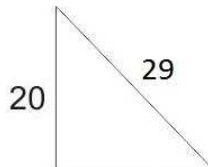
- A. 31
- B. 49
- C. 39
- D. 41**

10. Calculate the length of the third side.



- A. 8
- B. 9**
- C. 10
- D. 9.5

11. Calculate the length of the third side.



- A. 21**
- B. 20
- C. 19.99
- D. 22

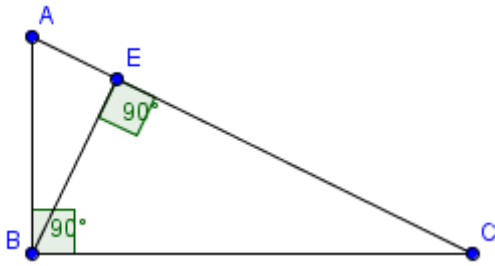
12. In the evening, the shadow of an object is very long due to the low position of the Sun. A 20m high lamp post makes a 99m long shadow. What is the distance from the top of the pole to the top of its shadow?

- A. 97m
- B. 101m**
- C. 79m
- D. 119m

13. How long is the diagonal(diameter) of a monitor with height and width - 27in and 36in respectively?

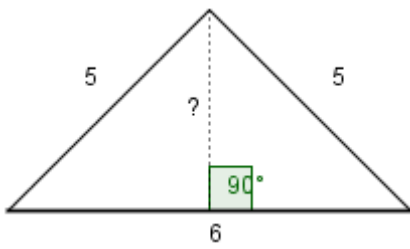
- A. 90in
- B. 31in
- C. 24in
- D. 45in**

14. For the triangle it is given that $AE^2 + EB^2 = 9$ and $BE^2 + EC^2 = 16$
 Find $AC = ?$



- A. 4.49
- B. 5.5
- C. 5**
- D. 8

15. Find the height of this triangle.



- A. 5
- B. 3.8
- C. 4**
- D. 3.5