

## ST. LAWRENCE HIGH SCHOOL

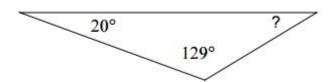
## A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Algebra and Geometry Class: 7 Date: 20.06.20 Duration: 40 min Worksheet 37 Full Marks: 15

## **TRIANGLES CONSTRUCTION**

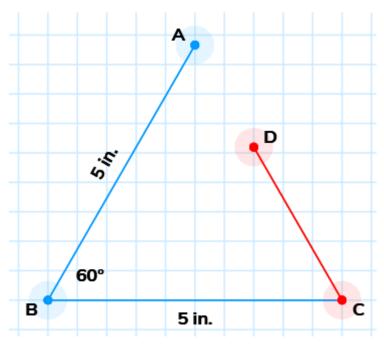
## **Choose the Correct options:**

- 1. Does a triangle with these side lengths exist?
- 20, 10, 9
  - (a) Yes,
  - (b) only one
  - (c) No
  - (d) Yes, many
- 2. Does a triangle with these side lengths exist?
- 15, 12, 9
  - (a) Yes,
  - (b) only one
  - (c) No
  - (d) Yes, many
- 3. Find the measure of each angle indicated.

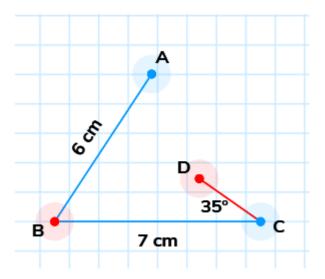


- (a) 33°
- (b) 136°
- (c) 36°
- (d) 31°
- 4. If 2 of the angles of a triangle are 30 and 70 degrees, the third angle measures...
  - (a) 80
  - (b) 100
  - (c) 60
  - (d) 90
- 5. The Triangle Inequality Theorem states the sum of the lengths of any two sides of a triangle is \_\_\_\_\_\_ the length of the third side.
  - (a) greater than
  - (b) less than
  - (c) equal to
  - (d) Can't say
- 6. If you are given two sides of a triangle what will be true?

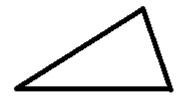
- (a) You can make infinitely many unique triangles.
- (b) You can't make any triangles with this information.
- (c) You can only make one unique triangle.
- (d) You can only make 2 unique triangles.
- 7. If you are given three angles of a triangle what will be true?
  - (a) You can make infinitely many unique triangles.
  - (b) You can't make any triangles with this information.
  - (c) You can only make one unique triangle.
  - (d) You can only make 2 unique triangles.
- 8. How many different triangles can you make if you are given these measurements?



- (a) 1
- (b) 2
- (c) 3
- (d) Infinitely many
- 9. How many different triangles can you make if you are given these measurements?



- (a) 0
- (b) 1
- (c) 2
- (d) 3
- 10. An equilateral triangle has
  - (a) all sides in different lengths
  - (b) all sides in equal lengths.
  - (c) two sides in equal lengths.
  - (d) Two medians of equal length
- 11. Which set of side lengths will make a triangle?
  - (a) 6, 8, 13
  - (b) 7, 9, 18
  - (c) 7, 7, 14
  - (d) 2, 6, 9
- 12. Classify the following Triangle

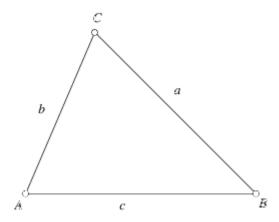


- (a) Right Isosceles Triangle
- (b) Acute Isosceles Triangle
- (c) Right Scalene Triangle

- (d) Acute Scalene Triangle
- 13. Classify the following Triangle



- (a) Right Isosceles Triangle
- (b) Obtuse Isosceles Triangle
- (c) Right Scalene Triangle
- (d) Acute Scalene Triangle
- 14. What type of triangle has only one right angle and two congruent sides?
  - (a) Right Isosceles Triangle
  - (b) Obtuse Isosceles Triangle
  - (c) Right Scalene Triangle
  - (d) Acute Scalene Triangle
- 15. Classify the following Triangle



- (a) Acute Scalene Triangle
- (b) Right Isosceles Triangle
- (c) Acute Equilateral Triangle
- (d) Obtuse Isosceles Triangle