## ST. LAWRENCE HIGH SCHOOL <br> A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Algebra and Geometry
Class: 7
Duration: $\mathbf{4 0}$ min
Worksheet Solution 37
Date: 20.06.20
Full Marks: 15

## 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) $33^{\circ}$
(b) $136^{\circ}$
(c) $36^{\circ}$
(d) $31^{\circ}$
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
$\qquad$ 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
