



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



**Sub: Algebra and Geometry**

**Class: 7**

**Date: 16.11.20**

**Duration: 40 min**

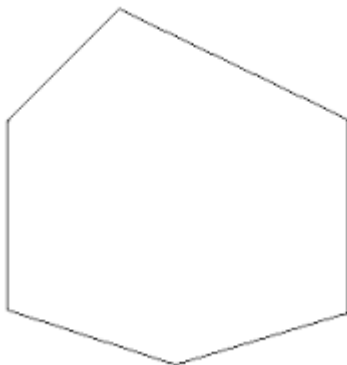
**Worksheet Solution 04**

**Full Marks: 15**

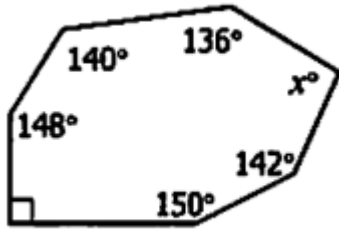
**Polygon**

**Choose the Correct options:**

1. What is the sum of the interior angles of a triangle?
  - a.  $60^\circ$
  - b.  $90^\circ$
  - c.  $120^\circ$
  - d.  $180^\circ$**
2. What is the measure of ONE interior angle in a regular pentagon (5-sides)?
  - a.  $90^\circ$
  - b.  $108^\circ$**
  - c.  $120^\circ$
  - d.  $180^\circ$
3. What is the sum of the interior angles of a nonagon (9 sides)?
  - a.  $1440^\circ$
  - b.  $900^\circ$
  - c.  $1080^\circ$
  - d.  $1260^\circ$**
4. Find the angle sum of the interior angles of the polygon.



- a.  $180^\circ$
  - b.  $540^\circ$
  - c.  $720^\circ$**
  - d.  $1080^\circ$
5. Find the value of X



- a. 94
  - b. 25
  - c. 36
  - d. 180
6. What is the name of a 7 sided polygon?
- a. Hexagon
  - b. Heptagon
  - c. Octagon
  - d. nonagon
7. How many sides does an octagon have?
- a. 8
  - b. 7
  - c. 6
  - d. 9
8. What is the sum of the exterior angles in a decagon?
- a. 10
  - b. 360
  - c. 361
  - d. 440
9. Which formula is used to find the sum of the interior angles of a polygon?
- a. 180
  - b.  $(n-2)180 \div n$
  - c.  $(n-2)180$
  - d.  $n(n-3)/2$
10. If the measure of an exterior angle of a regular polygon is  $24^\circ$ , how many sides does the polygon have?
- a. 12
  - b. 13
  - c. 14
  - d. 15

11. What is a polygon?

- a. **A closed figure made up of straight line segments**
- b. An open figure made up of straight line segments
- c. A closed figure made up of curved edges
- d. An closed figure made up of crossed line segments

12. A polygon's interior angles add up to 2700. How many sides does the polygon have?

- a. **17**
- b. 15
- c. 19
- d. 11

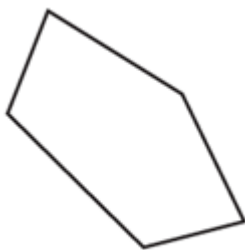
13. Find the number of sides of a regular polygon with one interior angle measuring  $165^\circ$

- a. **24**
- b. 22
- c. 26
- d. 20

14. Josh drew a heptagon as a window on his picture. How many sides does his window have?

- a. 6
- b. **7**
- c. 8
- d. 9

15. Is the figure a polygon? Is it convex or concave?



- a. Not a polygon, convex
- b. **Polygon, convex**
- c. Not a polygon
- d. Polygon, concave