Name:

Date:

School:

Facilitator:

7.01 Types of Polygons Study Guide

**Match the terms to their definitions.**

      1. Polygon a. Line that connect two non-adjacent vertices

      2. Convex b. The intersection point of two sides

      3. Vertex c. A polygon where all diagonals are contained inside the figure

      4. Diagonal d. A polygon where at least one diagonal is found outside the figure

      5. Concave e. A closed figure made up of a finite number of sides

      6. Side f. When all angles of a figure are equal measures

      7. Equilateral g. A line used to create a shape

      8. Equiangular h. When all lines of a figure are equal lengths

      9. Regular I. A polygon which has all sides equal and all angle measures equal

**Write in the number of sides for each polygon mentioned below**

10. Triangle

11. Pentagon

12. Heptagon

13. Hexagon       `

14. Decagon

15. Quadrilateral

16. Octogon

17. Nonagon

18. Dodecogon

19. 23-gon      

A nine-sided figure.

* The side measures are 11 units, 11 units, 11 units, 11 units, 11 units, 11 units, 11 units, 11 units, and 11 units.
* The eight angle measures given are 160 degrees, 160 degrees, 160 degrees, 160 degrees, 60 degrees, 225 degrees, 225 degrees, and 60 degrees.
* The ninth angle measure is not given.


A nine-sided figure. 
• The side measures are 11 units, 11 units, 11 units, 11 units, 11 units, 11 units, 11 units, 11 units, and 11 units.
•  The eight angle measures given are 160 degrees, 160 degrees, 160 degrees, 160 degrees, 60 degrees, 225 degrees, 225 degrees, and 60 degrees.
• The ninth angle measure is not given. 


20. Identify the polygon below. Classify it as convex or concave. State if it is equilateral, equiangular, regular or neither.

**Number of sides:**

**Concave or convex:**

**Equilateral, equiangular, regular, or neither:**