

Chapter 7 Quiz Prep

MULTIPLE CHOICE (16 points)

1. Give examples of:
 - a. Concave polygons
 - b. Convex polygons
 - c. Regular polygons
2. Given a diagram, determine if the quadrilateral is a parallelogram. If so, justify your answer.
3. Given the sum of the interior angles of a polygon, determine how many sides the polygon has
4. Use **properties** of parallelograms to find unknown angle measures and side lengths (6 points)
 - a. If $\parallel$ -gram $\rightarrow$ opposite sides congruent
 - b. If $\parallel$ -gram $\rightarrow$ opposite angles congruent
 - c. If $\parallel$ -gram $\rightarrow$ consecutive angles supplementary
 - d. If $\parallel$ -gram $\rightarrow$ diagonals bisect each other

FREE RESPONSE

5. Find the sum of the interior angles of a polygon, and use it to find unknown variables/angle measures within the polygon. (4 points)
6. Write a two-column proof: given a diagram, prove that the quadrilateral is a parallelogram. (5 points)
 - a. REVIEW THE FOLLOWING! You may need to use it in the proof...
 - i. Congruent Triangles and CPCTC
 - ii. Base Angles Theorem/Converse of Base Angles Theorem (Isosceles Triangles)
 - iii. Angle relationships with parallel lines and transversals...
 - a. If $\parallel \rightarrow$ corresponding angles congruent
 - b. If $\parallel \rightarrow$ alternate interior angles congruent
 - c. If $\parallel \rightarrow$ alternate exterior angles congruent
 - d. If $\parallel \rightarrow$ consecutive angles supplementary
 - e. If corresponding angles congruent $\rightarrow \parallel$
 - f. If alternate interior angles congruent $\rightarrow \parallel$
 - g. If alternate exterior angles congruent $\rightarrow \parallel$
 - h. If consecutive angles supplementary $\rightarrow \parallel$