

1. **6-1 Polygon:** 2-dimensional plane figure (planar), closed, shape made of straight lines. Poly = many; gon = angle
2. **6-1 Equilateral Polygon:** A polygon whose sides are all congruent.
3. **6-1 Equiangular Polygon:** A polygon whose angles are all congruent.
4. **6-1 Regular Polygon:** A polygon that is BOTH equilateral and equiangular
5. **6-1 Diagonal:** Connects 2 non-consecutive vertices
6. **6-1 Convex Polygon:** A polygon whose diagonals contain no points outside the polygon. Every interior angle is < 180 degrees.
7. **6-1 Concave Polygon:** A polygon whose diagonals contain points outside the polygon. At least one interior angle is > 180 degrees.
8. **6-1 Quadrilateral:** Polygon with 4 sides, 4 vertices
9. **6-1 Pentagon:** 5-sided polygon
10. **6-1 Hexagon:** 6-sided polygon
11. **6-1 Octagon:** 8-sided polygon
12. **6-1 Decagon:** 10-sided polygon
13. **6-1 N-gon:** n-sided polygon
14. **6-1 27-gon:** 27-sided polygon
15. **6-1 The SUM of the INTERIOR angles of a convex polygon with n sides:** $(n-2)180$ degrees
16. **6-1 Interior angles: 3 sides = 180, 4 sides = 360, 5 sides = 540. Therefore...:** add 180 degrees for each new side
17. **6-1 The measure of EACH INTERIOR angle of an equiangular or regular polygon:** $(n-2)180 / n$ degrees
18. **6-1 The SUM of the EXTERIOR angles of a convex polygon (one at each vertex):** 360 degrees
19. **6-1 The measure of EACH EXTERIOR angle of an equiangular or regular polygon (one at each vertex):** $360/n$ degrees
20. **6-2 Parallelogram:** A quadrilateral with both pairs of opposite sides parallel
21. **6-2 Opposite Sides:** Across from each other; do not share a vertex
22. **6-2 The opposite sides of a parallelogram are...:** parallel and congruent
23. **6-2 Opposite Angles:** Across from each other; do not share a side
24. **6-2 The opposite angles of a parallelogram are...:** congruent
25. **6-2 Consecutive Angles:** Share a side
26. **6-2 The consecutive angles of a parallelogram are...:** supplementary
27. **6-2 The diagonals of a parallelogram...:** bisect each other
28. **6-2 Properties of Parallelograms:** Both pairs of opposite sides are parallel; Both pairs of opposite sides are congruent; Both pairs of opposite angles are congruent; Any 2 consecutive angles are supplementary; Both diagonals bisect each other; One pair of opposite sides are congruent AND parallel
29. **6-4 Rhombus:** A parallelogram with four congruent sides
30. **6-4 Rectangle:** A parallelogram with four right angles
31. **6-4 Square:** A parallelogram with four congruent sides and four right angles
32. **6-4 Relationships between Special Parallelograms (Rhombus, Rectangle, Square):** All squares are rectangles and rhombi/rhombuses. Not all rectangles and rhombi/rhombuses are squares.
33. **6-4 The diagonals of a rhombus...:** are perpendicular; bisect opposite angles; bisect each other
34. **6-4 The diagonals of a rectangle...:** are congruent; bisect each other
35. **6-4 The diagonals of a square...:** are congruent; are perpendicular; bisect opposite angles; bisect each other
36. **6-6 Trapezoid:** A quadrilateral with exactly one pair of parallel sides. Not a parallelogram.
37. **6-6 Bases of a trapezoid:** the parallel sides
38. **6-6 Legs of a trapezoid:** the nonparallel sides
39. **6-6 Base angles of a trapezoid:** 2 angles that share a base. There are 2 pairs of base angles.
40. **6-6 The consecutive angles between the bases of a trapezoid are...:** supplementary
41. **6-6 The midsegment of a trapezoid is parallel to the bases and equal in length to...:** the average/mean of the bases
42. **6-6 Isosceles Trapezoid:** A trapezoid with congruent legs
43. **6-6 The base angles of an isosceles trapezoid are...:** congruent
44. **6-6 The diagonals of an isosceles trapezoid are...:** congruent
45. **6-6 Kite:** A quadrilateral with two pairs of consecutive congruent sides and no opposite congruent sides. Not a parallelogram.
46. **6-6 The diagonals of a kite are...:** _____