

THE COMPLETE GUIDE TO GEOMETRIC SHAPES



MONOGON	1	
CIRCLE		SINGLE VERTEX WITH ONE 360° ARC EDGE
OVAL		CLOSED CURVE IN A PLANE THAT RESEMBLES AN ELLIPSE
DIGON	2	
CIRCLE (OR OVAL)		A PAIR OF 180° ARCS CONNECTING TO CREATE A ROUNDED SHAPE
TRIANGLE	3	3
THE SUM OF THE INTERIOR ANGLES OF A TRIANGLE ALWAYS EQUALS 180°		
EQUILATERAL TRIANGLE (AKA REGULAR TRIANGLE)		ALL SIDES ARE EQUAL LENGTH ALL ANGLES MEASURE 60°
ISOSCELES TRIANGLE		TWO SIDES OF EQUAL LENGTH TWO ANGLES OF SAME MEASURE
SCALENE TRIANGLE		NO EQUAL SIDES ALL ANGLES OF DIFFERENT MEASURE
RIGHT TRIANGLE		ONE RIGHT ANGLE (EQUAL TO 90°)
OBTUSE TRIANGLE		ONE OBTUSE ANGLE (GREATER THAN 90°) AND TWO ACUTE ANGLES (LESS THAN 90°)
ACUTE TRIANGLE		ALL THREE ANGLES ARE ACUTE (LESS THAN 90°)
QUADRILATERAL	4	4
THE SUM OF THE INTERIOR ANGLES OF A QUADRILATERAL ALWAYS EQUALS 360°		
SQUARE		ALL SIDES ARE EQUAL LENGTH ALL RIGHT ANGLES, EACH EQUALS 90°
RECTANGLE		OPPOSING SIDES ARE EQUAL ALL RIGHT ANGLES, EACH EQUALS 90°
PARALLELOGRAM		TWO PAIRS OF PARALLEL SIDES; OPPOSING SIDES ARE OF EQUAL LENGTH OPPOSING ANGLES ARE OF EQUAL MEASURE
RHOMBUS		ALL SIDES ARE EQUAL LENGTH OPPOSING ANGLES ARE OF EQUAL MEASURE
TRAPEZOID		NO EQUAL SIDES; ONLY TWO SIDES ARE PARALLEL NO EQUAL ANGLES
ISOSCELES TRAPEZOID		TWO SIDES ARE EQUAL LENGTH; THE OTHER TWO SIDES ARE PARALLEL THE BASE ANGLES ARE EQUAL
TRAPEZIUM		NO EQUAL SIDES; NO SIDES ARE PARALLEL NO EQUAL ANGLES
KITE		TWO PAIRS OF EQUAL-LENGTH SIDES THAT ARE ADJACENT TO EACH OTHER THE TWO INTERIOR ANGLES THAT ARE ON OPPOSITE SIDES OF THE SYMMETRY AXIS ARE EQUAL
PENTAGON	5	5
FIVE-SIDED POLYGON		
REGULAR PENTAGON		THE SUM OF THE INTERIOR ANGLES OF A PENTAGON EQUALS 540° EACH ANGLE EQUALS 108°
HEXAGON	6	6
SIX-SIDED POLYGON		
REGULAR HEXAGON		THE SUM OF THE INTERIOR ANGLES OF A HEXAGON EQUALS 720° EACH ANGLE EQUALS 120°
HEPTAGON	7	7
SEVEN-SIDED POLYGON		
REGULAR HEPTAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 900° EACH ANGLE EQUALS 128.57°
OCTAGON	8	8
EIGHT-SIDED POLYGON		
REGULAR OCTAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 1080° EACH ANGLE EQUALS 135°
NONAGON	9	9
NINE-SIDED POLYGON		
REGULAR NONAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 1260° EACH ANGLE EQUALS 140°
DECAGON	10	10
TEN-SIDED POLYGON		
REGULAR DECAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 1440° EACH ANGLE EQUALS 144°
HENDECAGON	11	11
ELEVEN-SIDED POLYGON		
REGULAR HENDECAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 1620° EACH ANGLE EQUALS 147.27°
DODECAGON	12	12
TWELVE-SIDED POLYGON		
REGULAR DODECAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 1800° EACH ANGLE EQUALS 150°
TRIDECAGON	13	13
THIRTEEN-SIDED POLYGON		
REGULAR TRIDECAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 1980° EACH ANGLE EQUALS 152.31°
TETRADECAGON	14	14
FOURTEEN-SIDED POLYGON		
REGULAR TETRADECAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 2160° EACH ANGLE EQUALS 154.29°
PENTADECAGON	15	15
FIFTEEN-SIDED POLYGON		
REGULAR PENTADECAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 2340° EACH ANGLE EQUALS 156°
HEXADECAGON	16	16
SIXTEEN-SIDED POLYGON		
REGULAR HEXADECAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 2520° EACH ANGLE EQUALS 157.5°
HEPTADECAGON	17	17
SEVENTEEN-SIDED POLYGON		
REGULAR HEPTADECAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 2700° EACH ANGLE EQUALS 158.82°
OCTADECAGON	18	18
EIGHTEEN-SIDED POLYGON		
REGULAR OCTADECAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 2880° EACH ANGLE EQUALS 160°
ENNEADECAGON	19	19
NINETEEN-SIDED POLYGON		
REGULAR ENNEADECAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 3040° EACH ANGLE EQUALS 161.05°
ICOSAGON	20	20
TWENTY-SIDED POLYGON		
REGULAR ICOSAGON		THE SUM OF THE INTERIOR ANGLES EQUALS 3240° EACH ANGLE EQUALS 162°

10 COMMON POLYHEDRONS

▣ FACES
 ▣ EDGES
 ▣ VERTICES

 CUBE 6 ▣ 12 ▣ 8 ▣	 CUBOID 6 ▣ 12 ▣ 8 ▣	 SPHERE 0 OR 1 ▣ 0 ▣ 0 ▣	 ELLIPSOID 0 OR 1 ▣ 0 ▣ 0 ▣	 CYLINDER 2 OR 3 ▣ 0 OR 2 ▣ 0 ▣
 CONE 1 OR 2 ▣ 0 OR 1 ▣ 1 (APEX) ▣	 TRIANGULAR PRISM 5 ▣ 9 ▣ 6 ▣	 TRIANGULAR-BASED PYRAMID 4 ▣ 6 ▣ 4 ▣	 SQUARE-BASED PYRAMID 5 ▣ 8 ▣ 5 ▣	 HEXAGONAL PRISM 8 ▣ 18 ▣ 12 ▣

PLEASE NOTE THAT THERE IS SOME DISAGREEMENT BETWEEN MATHEMATICIANS ON WHETHER TO ALLOW A FACE OR EDGE TO BE CURVED.

SOURCES:

[HTTPS://EN.WIKIPEDIA.ORG/WIKI/LIST_OF_TWO-DIMENSIONAL_GEOMETRIC_SHAPES](https://en.wikipedia.org/wiki/List_of_two-dimensional_geometric_shapes)
[HTTPS://WWW.MATH-SALAMANDERS.COM/LIST-OF-GEOMETRIC-SHAPES.HTML#CURVED](https://www.math-salamanders.com/list-of-geometric-shapes.html#curved)
[HTTP://MATHFORUM.ORG/LIBRARY/DRMATH/VIEW/64540.HTML](http://mathforum.org/library/drmath/view/64540.html)

