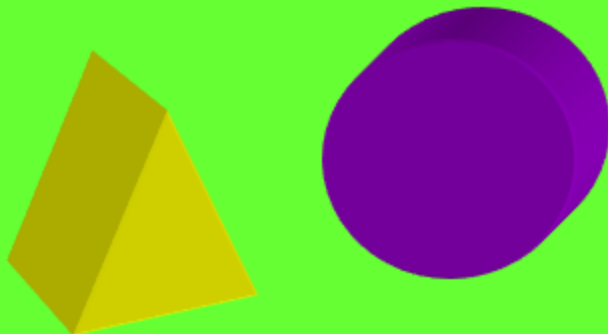
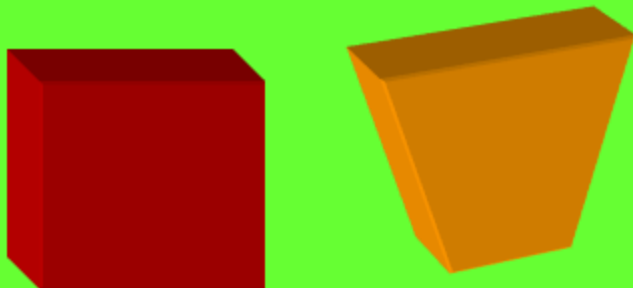
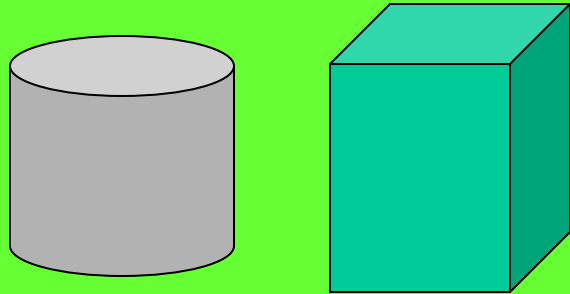


The Properties of 2D and 3D Shapes

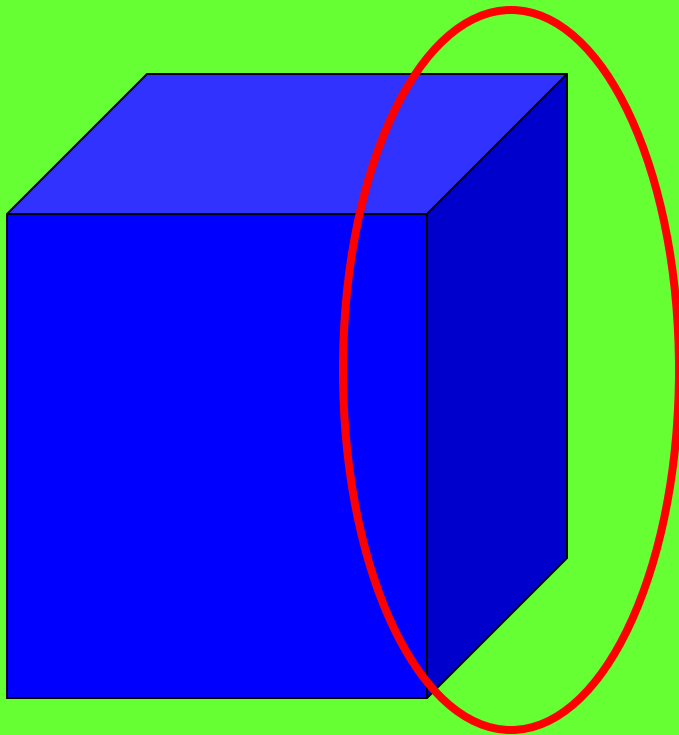
PART 1
SOLID SHAPES

Three-dimensional Shapes (3D)



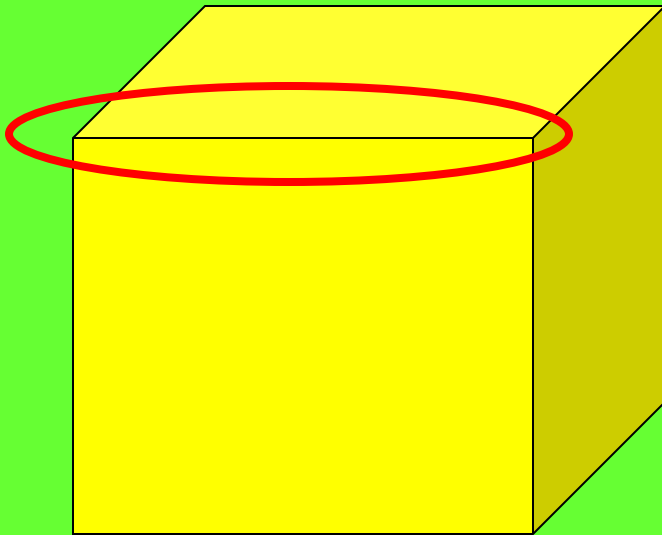
- These shapes are solid or hollow.
- They have three dimensions – length, width and height.

Face



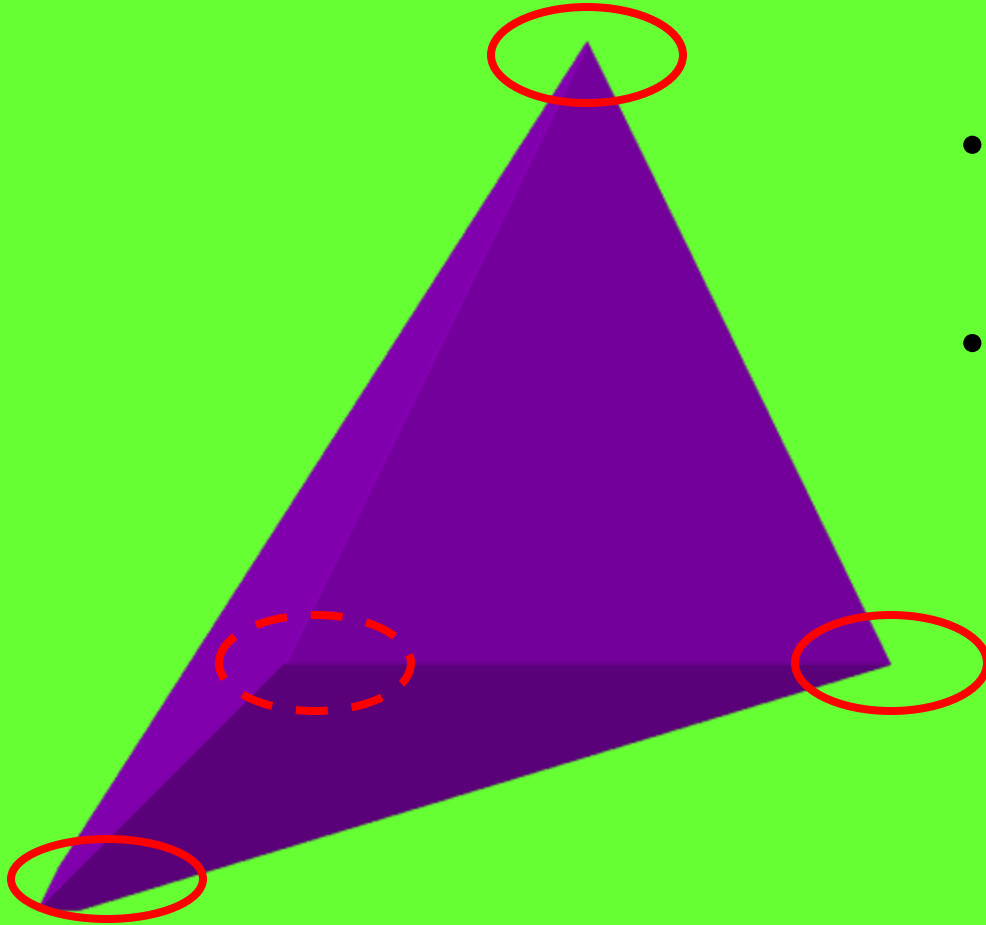
- Part of a shape that is flat.(Or curved)
- E.g. A cube has 6 of these.

Edge



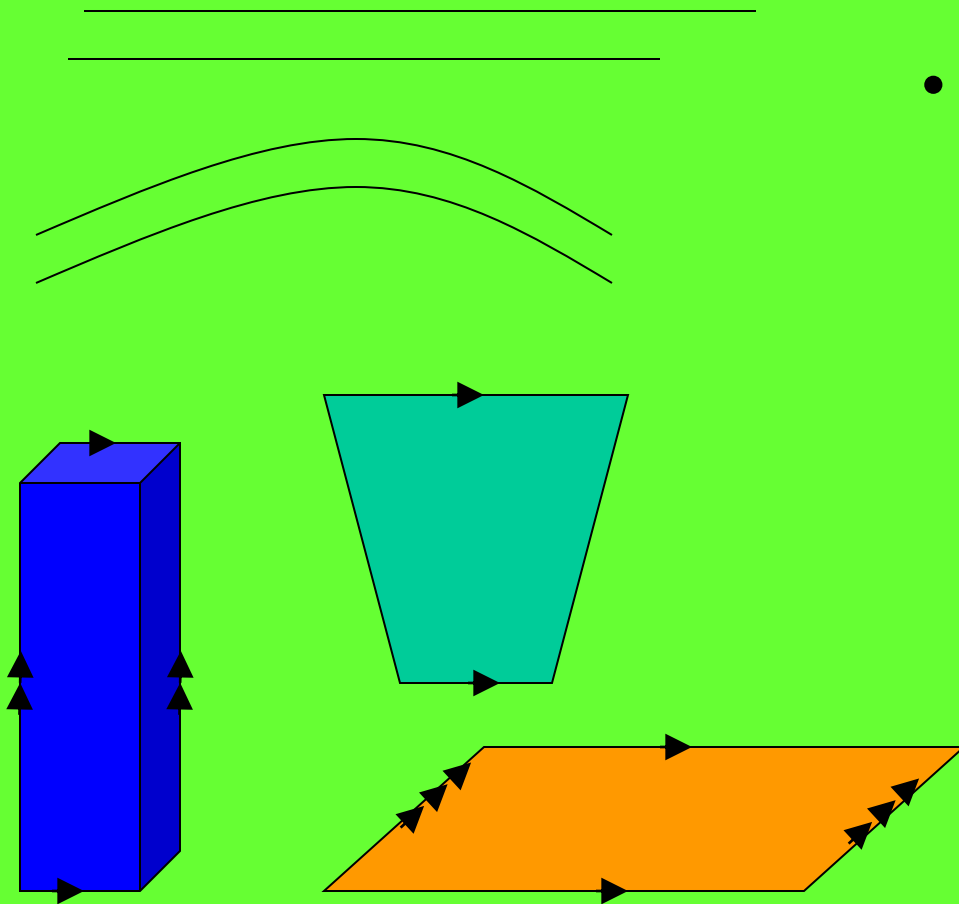
- The line where two faces meet.
- E.g. A cube has 12 of these.

Vertex (Vertices)



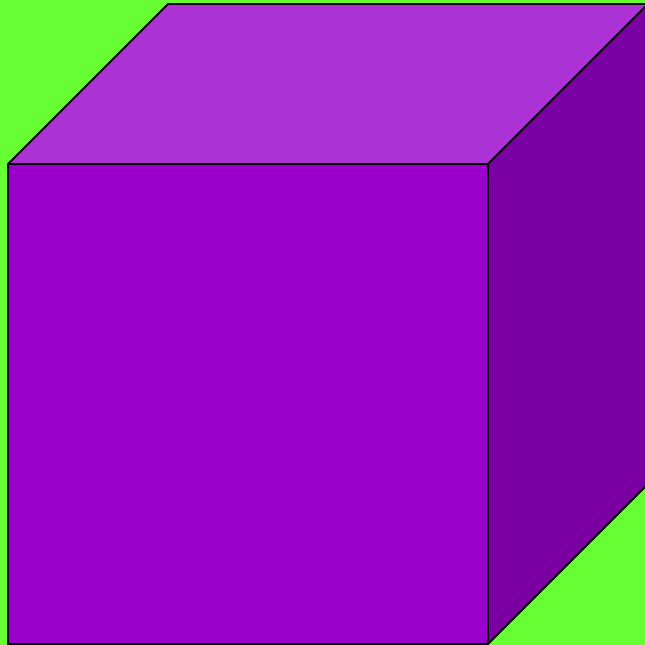
- The place where three or more edges meet.
- This pyramid has 4 of these.

Parallel



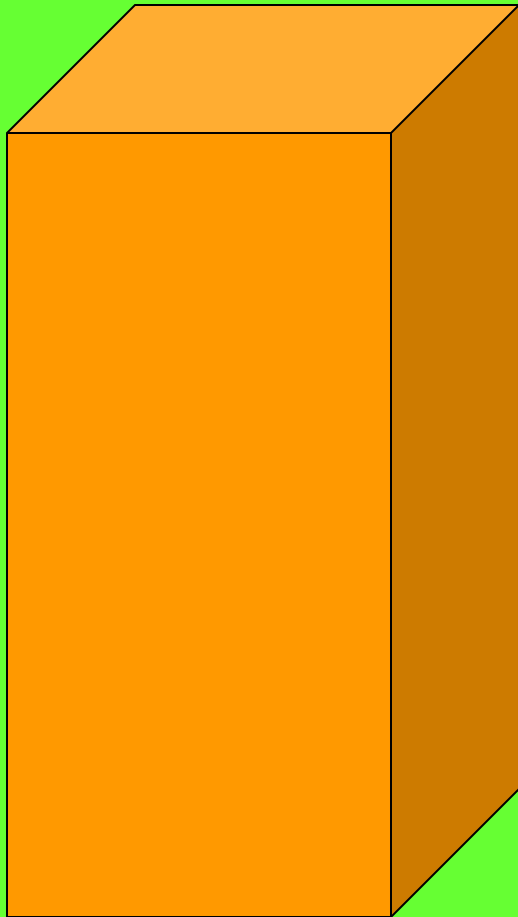
- These type of lines stay the same distance apart for their whole length. They do not need to be straight or the same length.

Cube



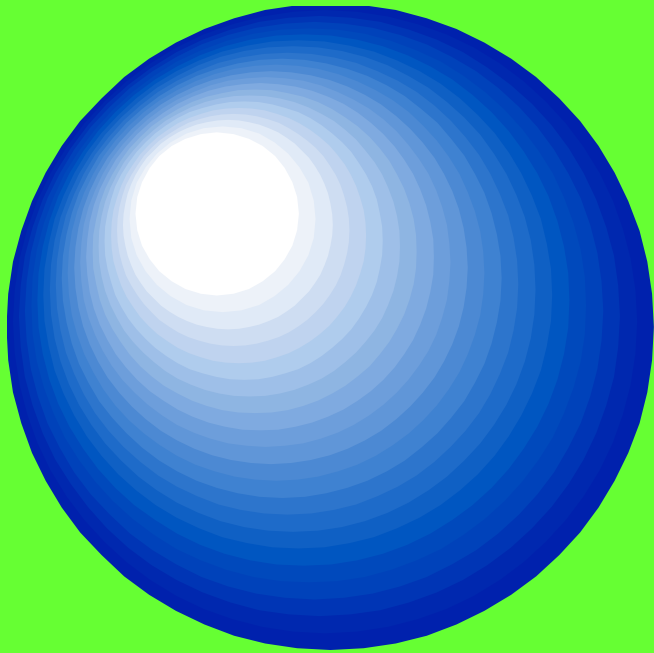
- A 3D shape.
- 6 square faces all the same size.
- 12 Edges all the same length.
- 8 Vertices.
- It's 2D shape is a square.

Cuboid



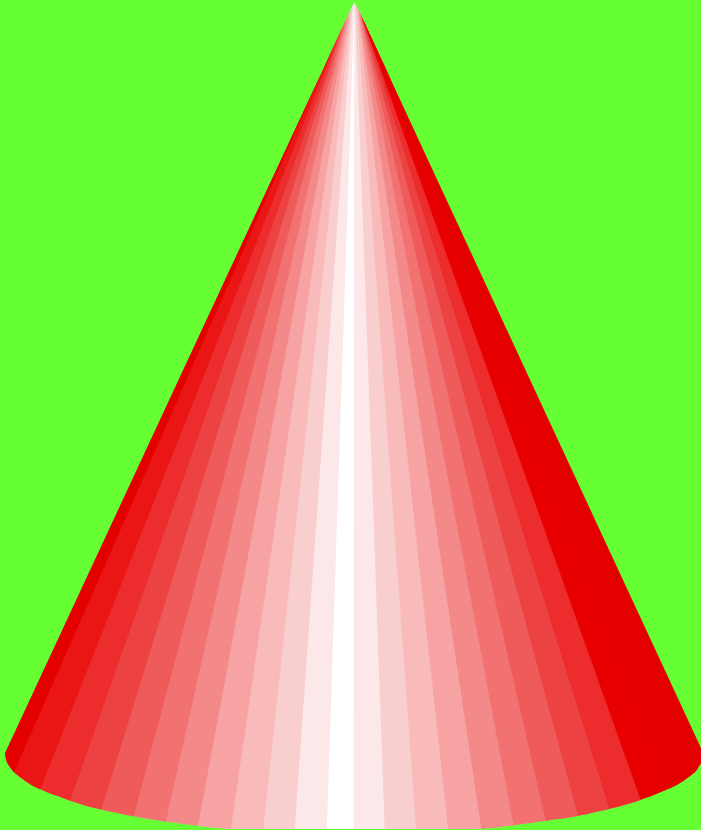
- A 3D shape.
- 6 rectangular faces.
- 12 Edges.
- 8 Vertices.
- It's 2D shape is a rectangle.

Sphere



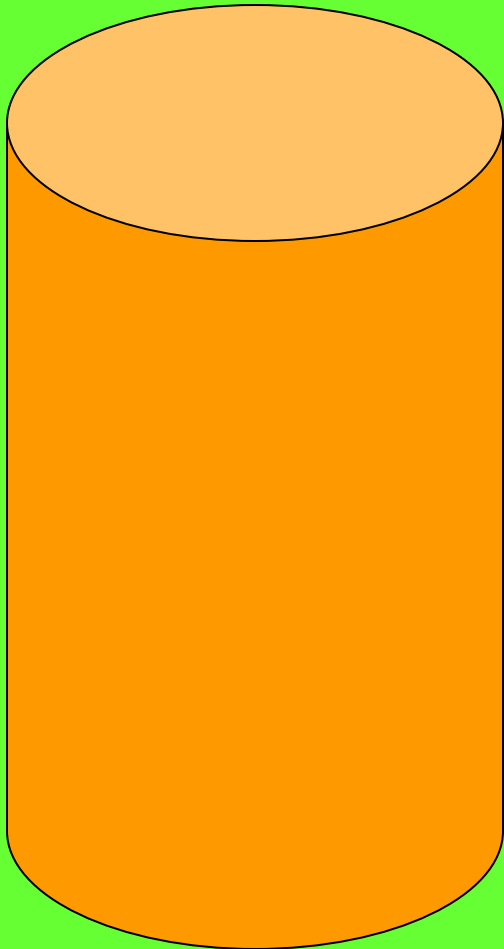
- A perfectly round 3D shape, like a ball.
- It has only one curved face.
- It's 2D shape is a circle.

Cone



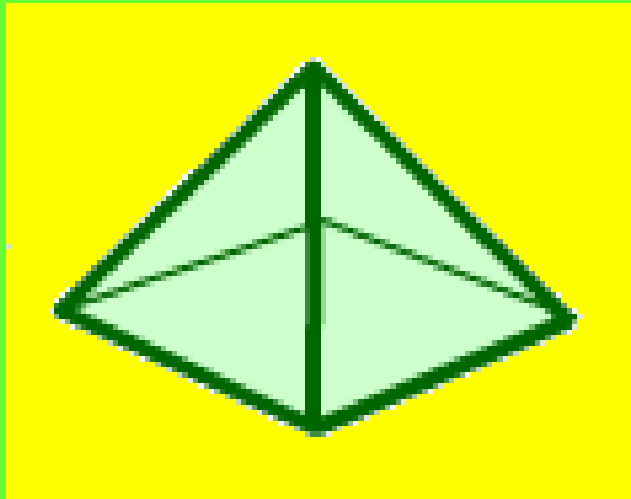
- A 3D shape.
- Has a circle at its base and a pointed vertex.
- Has 2 faces.

Cylinder



- A 3D shape.
- Circular ends of equal size.
- 2 Edges.
- 3 Faces.
- 0 Vertices.

Square base pyramid

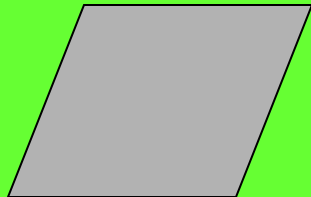
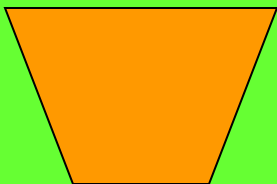
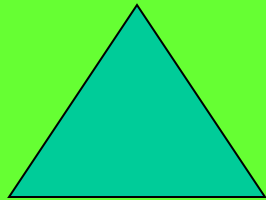
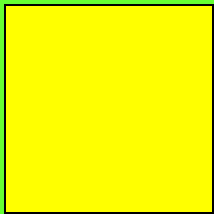
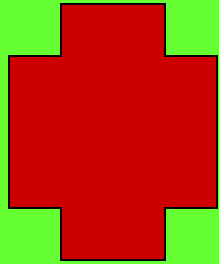
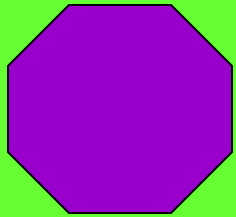


- A 3D shape.
- Has a square base-Face 1.
- 4 triangular faces.
- 5 faces in total.
- 8 Edges.
- 5 Vertices.

PART 2

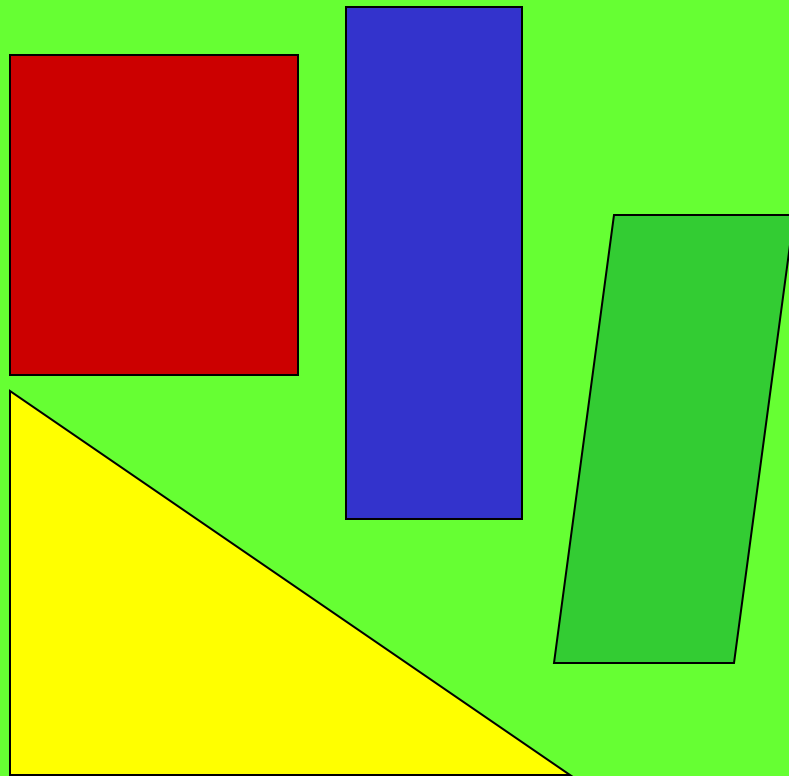
PLANE SHAPES

Two-dimensional Shapes (2D)



- These shapes are flat and can only be drawn on paper.
- They have two dimensions – length and width.
- They are sometimes called plane shapes.

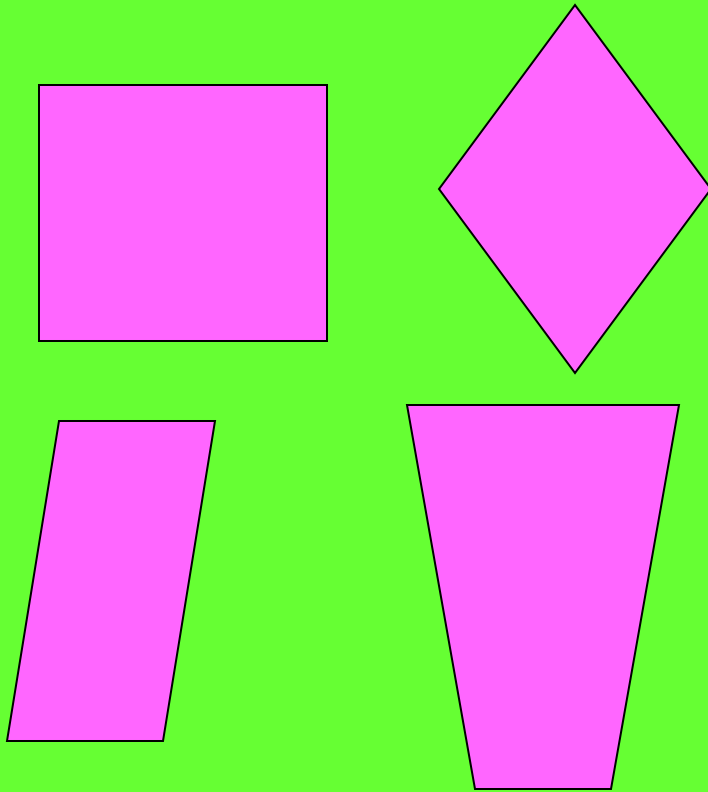
Polygons



Two-dimensional shapes
that have sides made
from straight lines.

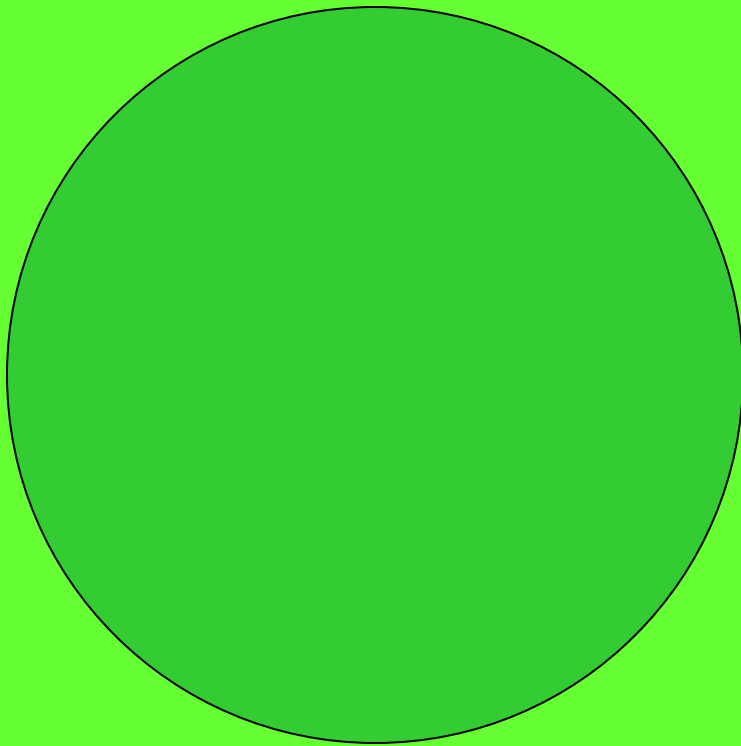
- E.g. triangles
squares
hexagons

Quadrilaterals



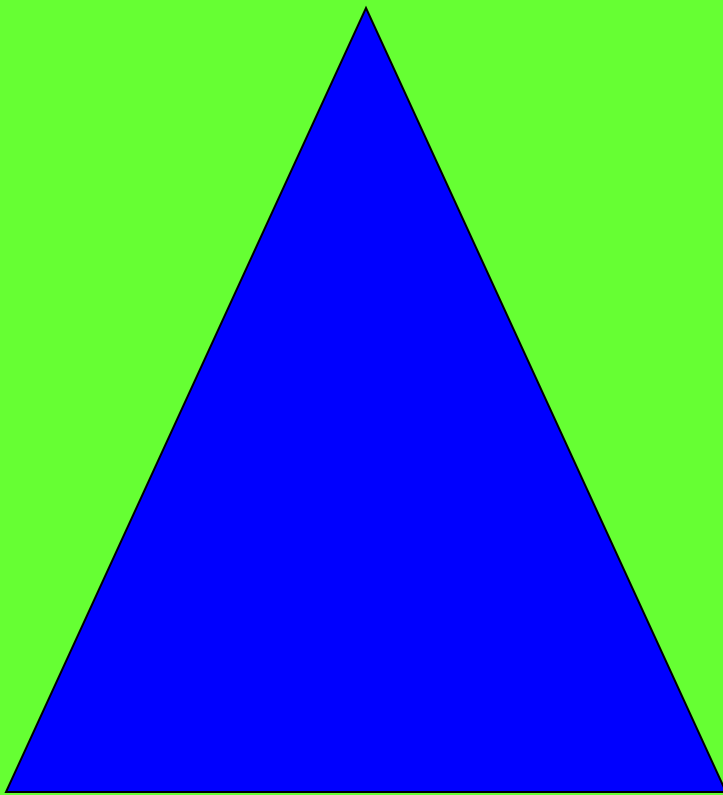
- Any 2D shapes with four straight sides.
- E.g. square
rhombus
rectangle
trapezium
kite

Circle



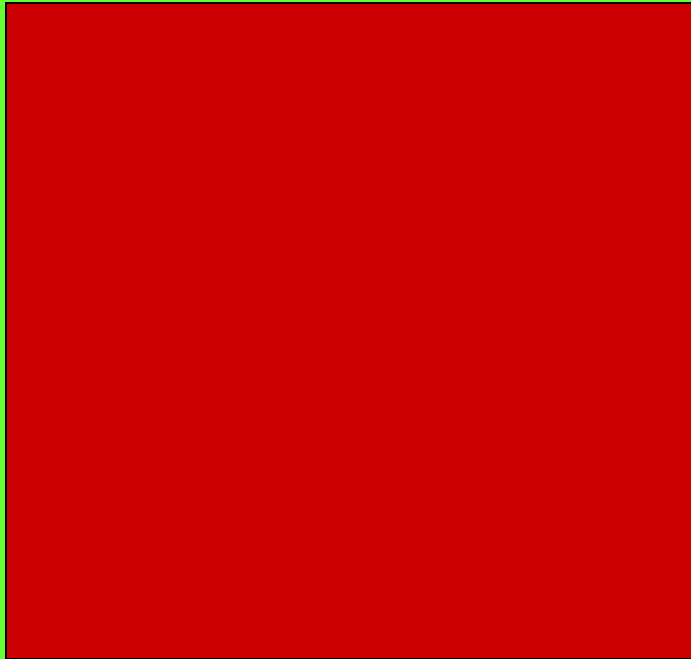
- A round flat 2D shape.
- No Straight sides, only one curved side.
- No corners.
- Infinite lines of symmetry.

Triangle



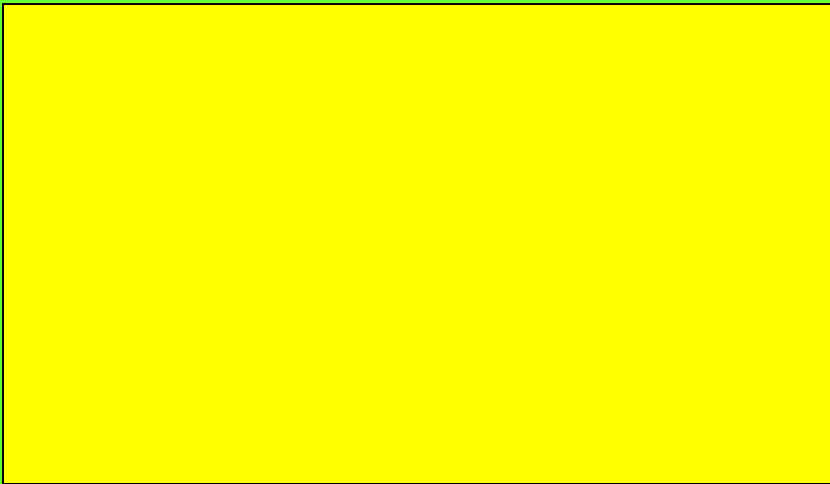
- A 2D Shape.
- 3 straight sides.
- 3 Corners.
- A regular triangle (equilateral) has 3 lines of symmetry.
- Can you name 4 different kinds?

Square



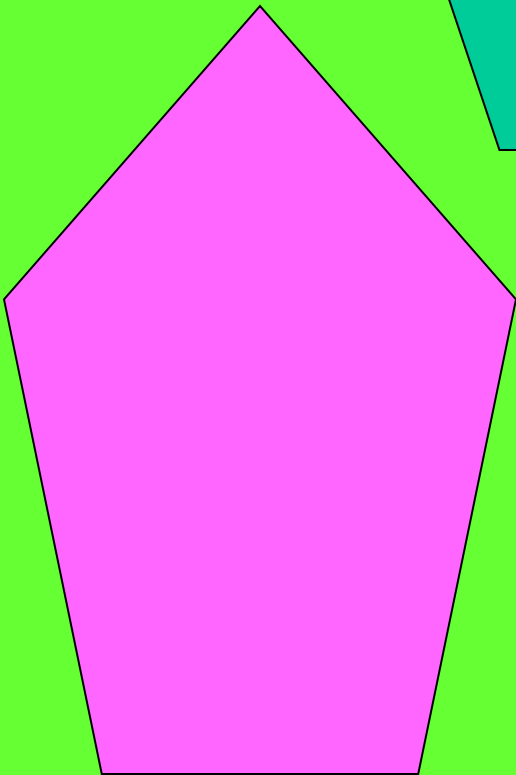
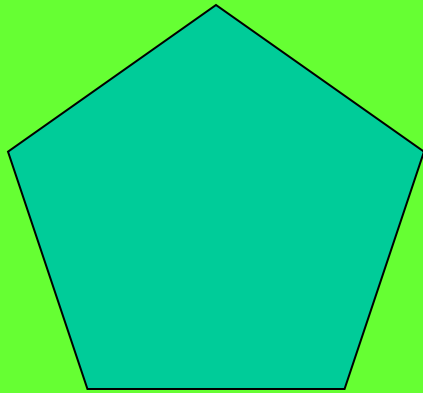
- A 2D shape.
- 4 sides of the same length.
- 4, 90° angles.
- 4 corners.
- 4 Lines of symmetry.

Rectangle



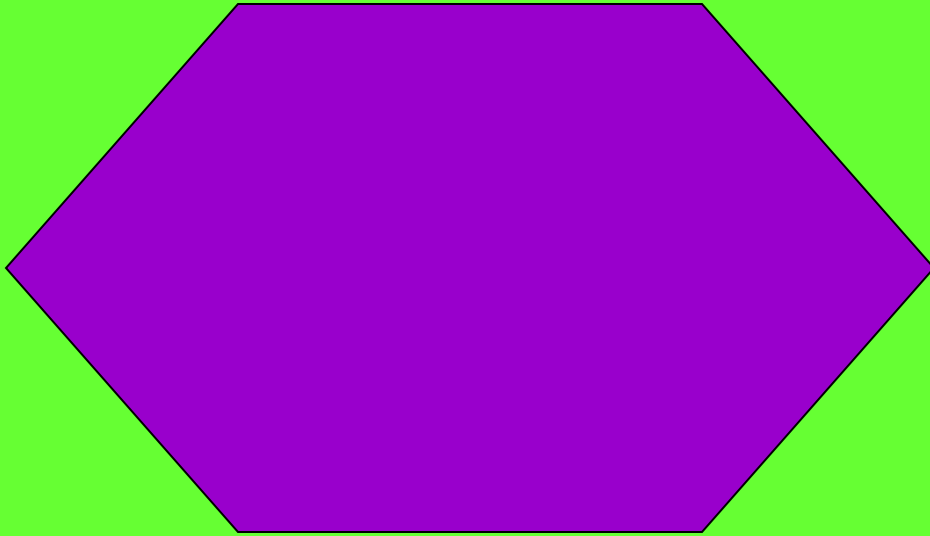
- A 2D shape.
- four straight sides
- Has two pairs of parallel sides that meet at right angles.
- This means 2 sides are long and 2 are shorter.
- 2 Lines of symmetry.

Pentagon

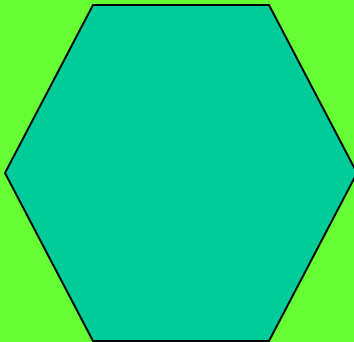


- A 2D shape.
- 5 straight sides.
- 5 Corners.
- 5 Lines of Symmetry.

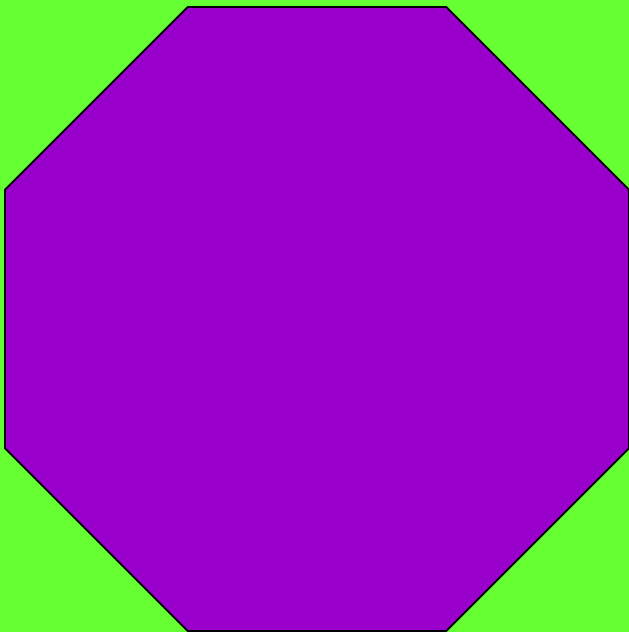
Hexagon



- A 2D shape.
- 6 straight sides
- 6 Corners.
- 6 Lines of symmetry.



Octagon



- A 2D shape.
- 8 straight sides
- 8 Corners.
- 8 Lines of Symmetry.