

Triangles (2D) - Flat shapes with three sides and three angles

Sides: 3, can be the same or different lengths

Angles: 3, may be obtuse, acute or right

Lines: no parallel lines

Perpendicular Lines (2D)

- Lines that cross at a 90° angle (Right Angle)

Parallel Lines (2D) - Lines that are always the same distance apart and never touch

Hexagons (2D) – closed flat figures with 6 sides and 6 angles

Sides: 6, can be the same or different lengths

Angles: 6, may have obtuse, acute or right angles

Lines: may have parallel lines, perpendicular lines, and/or lines that intersect at different angles

Pentagons (2D) - Closed flat figures with 5 sides and 5 angles.

Sides: 5, can be the same or different lengths

Angles: 5, may be obtuse, acute or right

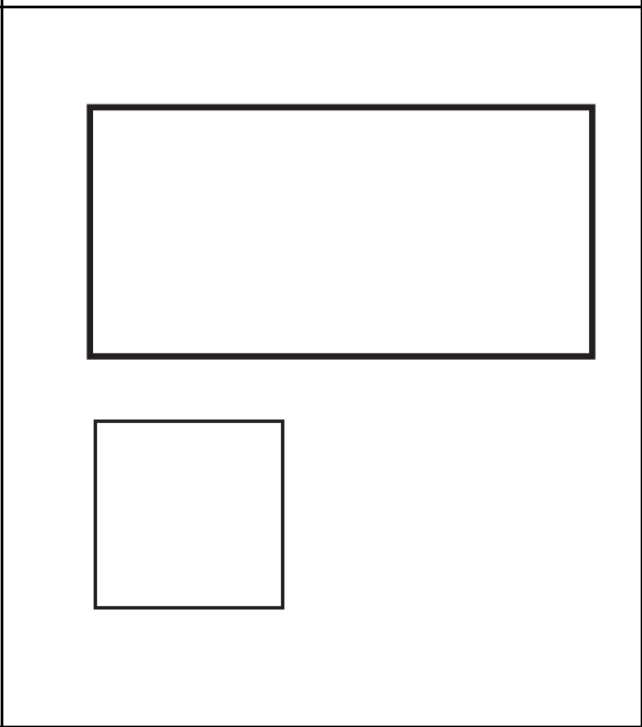
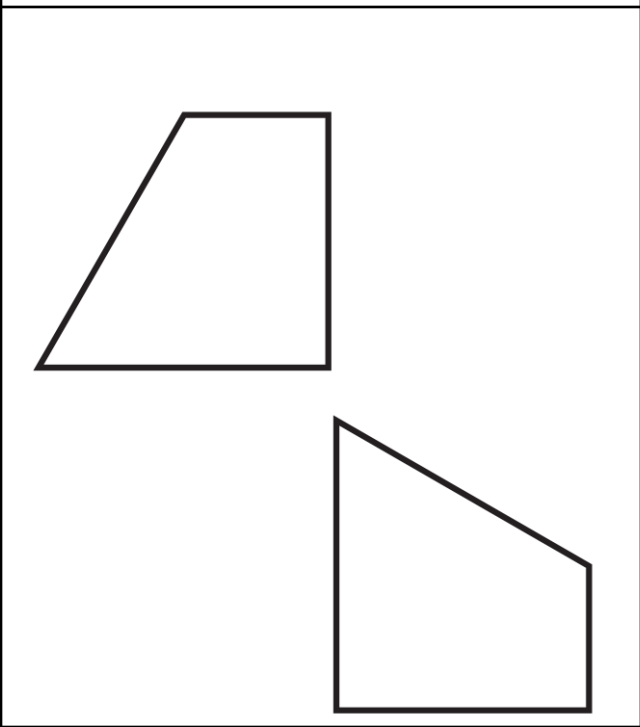
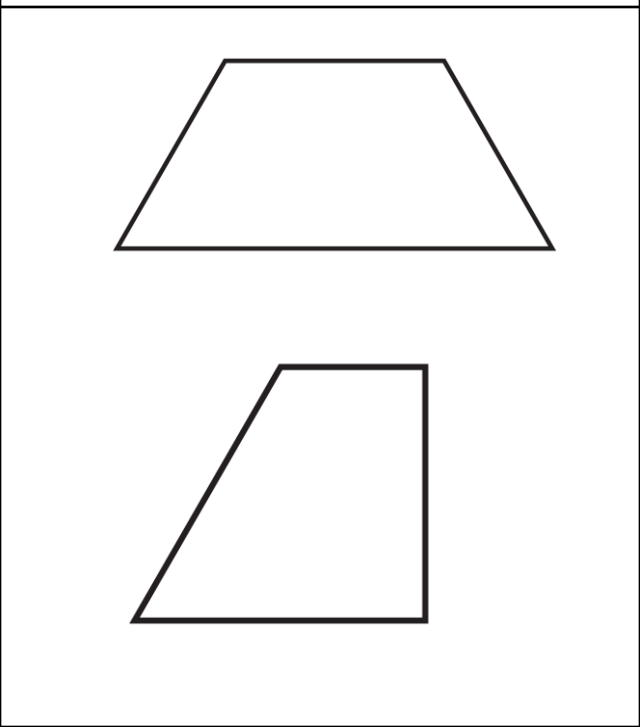
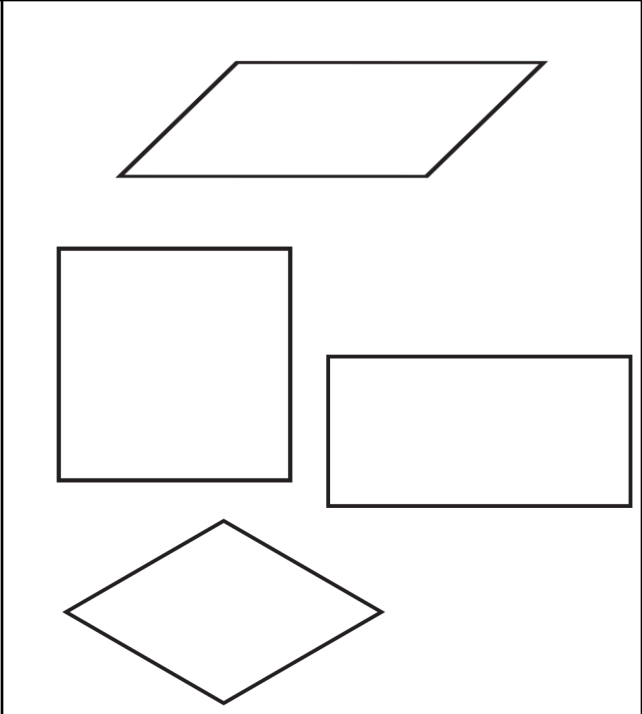
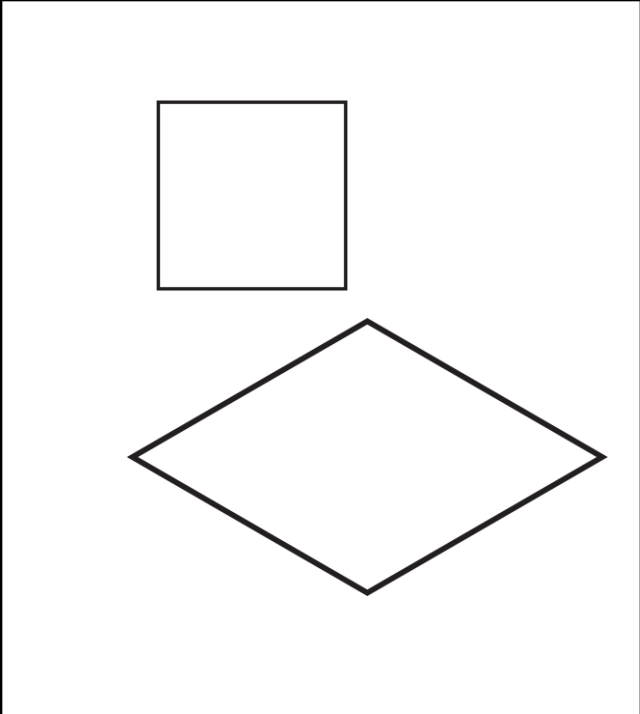
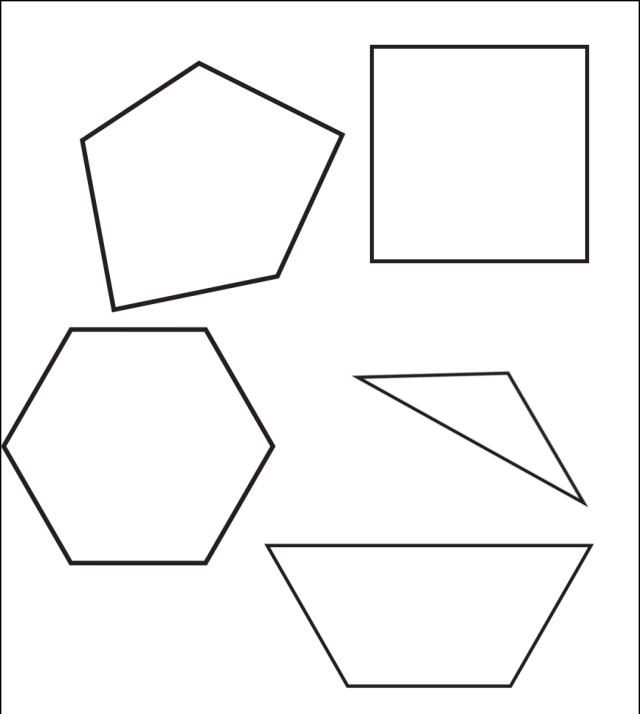
Lines: may have parallel lines, perpendicular lines, and/or lines that intersect at different angles

Quadrilaterals (2D) - Flat shapes that have four lines and four angles

Sides: 4, can be the same or different lengths

Angles: 4, may be obtuse, acute or right

Lines: may have parallel lines, perpendicular lines, and/or lines that intersect at different angles



Parallelograms (2D) - Four-sided figures (quadrilaterals) with two pairs of parallel lines

Sides:

- 4 sides
- 2 pairs of congruent (equal length) sides

Angles:

- 4, may be obtuse, acute or right
- 2 pairs of congruent angles

Lines: made up of 2 pairs of parallel lines

Rhombus (2D) - Flat shapes with 4 equal, straight sides. A rhombus is a quadrilateral parallelogram.

Sides:

- 4 sides
- All 4 sides are congruent (equal) in length

Angles:

- 4, may be obtuse, acute or right
- 2 pairs of congruent angles

Lines: made up of 2 pairs of parallel lines

Polygons (2D) - Closed flat figures that are made up of straight lines

Sides:

- Any number
- Any length

Angles:

- Same number of angles as sides
- May be acute, obtuse or right

Lines: may have some parallel, some perpendicular, some that intersect at different angles

Rectangles (2D) - Flat four-sided shapes with four straight sides and four right angles. A rectangle is a quadrilateral parallelogram.

Sides:

- 4 sides
- 2 pairs of congruent (equal length) sides

Angles:

- 4 right (90°) angles

Lines: made up of 2 pairs of parallel lines

Right Trapezoid (2D) - A trapezoid with two right angles. A trapezoid is a quadrilateral.

Sides:

- 4 sides
- Sides may be of different lengths

Angles:

- 2 right (90°) angles

Lines: exactly one pair of parallel lines

Trapezoid (2D) - Four-sided figures with exactly one pair of parallel lines. A trapezoid is a quadrilateral.

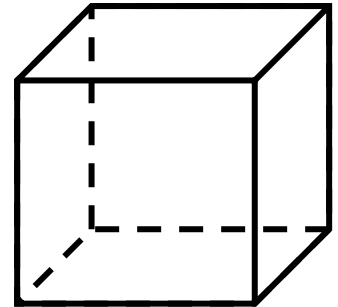
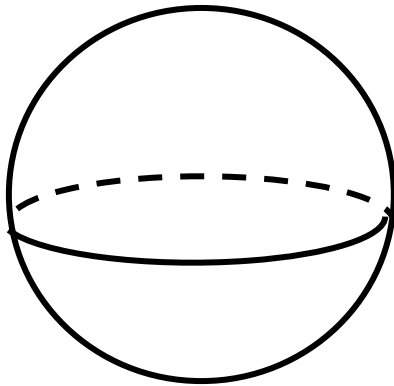
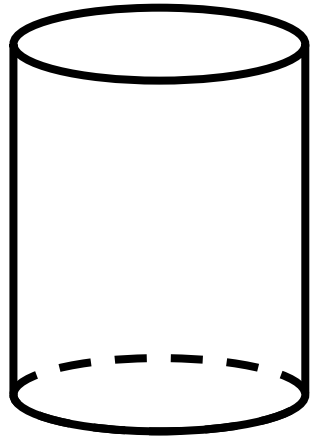
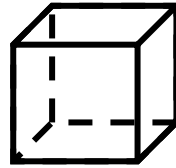
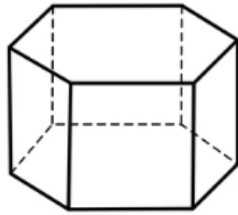
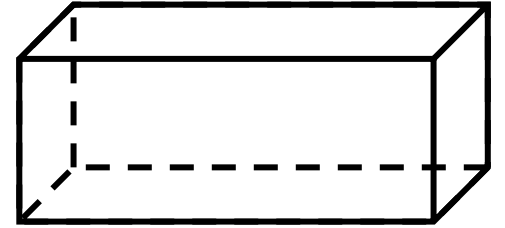
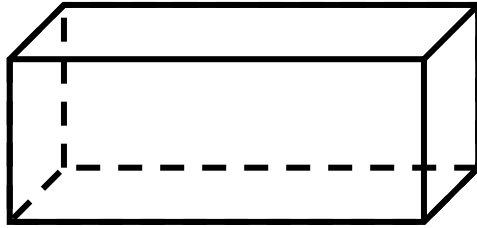
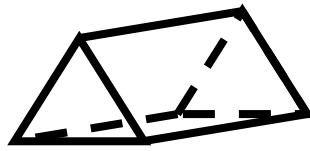
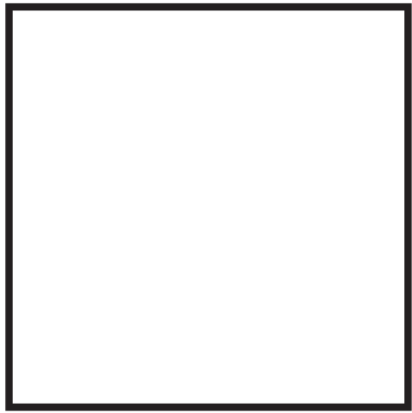
Sides:

- 4 sides
- Sides may be of different lengths

Angles:

- May have acute, obtuse or right angles

Lines: exactly one pair of parallel lines



Rectangular Prism (3D) –

A three- dimensional figure with six faces that are rectangles.

Prism (3D) – A three-dimensional figure with two identical shapes facing each other. These identical shapes are called “bases.” The bases can be any polygon.

Square (2D) - A flat shape with 4 equal, straight sides and 4 right angles. A square is a quadrilateral parallelogram. Squares are also rectangles and rhombuses.

Sides:

- 4 congruent (same length) sides

Angles:

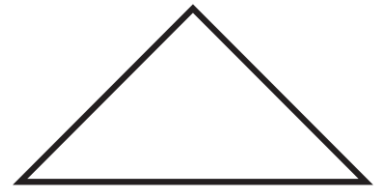
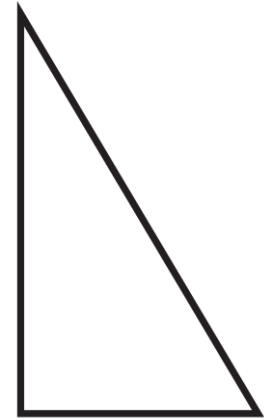
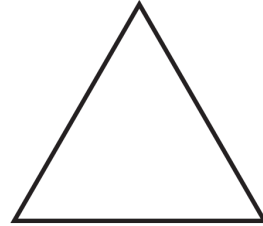
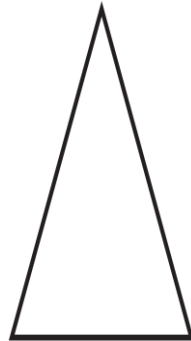
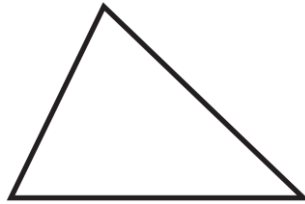
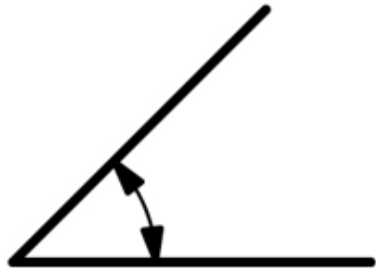
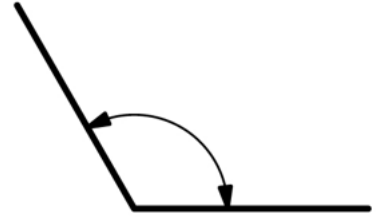
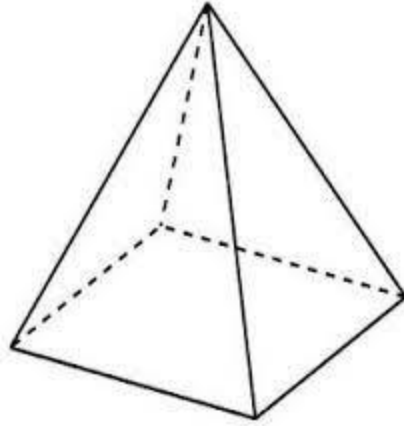
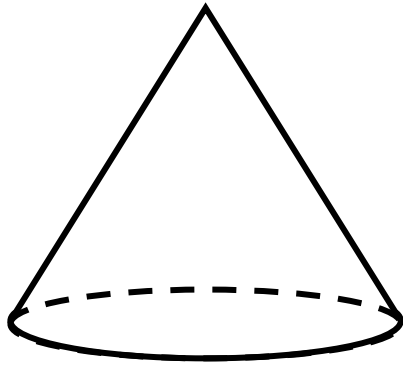
- 4 right (90°) angles

Lines: made up of 2 pairs of parallel lines

Cube (3D) – A prism with six identical square faces.

Sphere (3D) - A three-dimensional object shaped like a ball. Every point on the surface is the same distance from the center.

Cylinder (3D) – three-dimensional figure that has two identical bases (usually a circle or an oval, but could be any curved shape) connected by a curved surface.



Obtuse Angle (2D) - An angle that measures more than 90° but less than 180°

Pyramid (3D) – Three-dimensional figure in which the sides are triangles that meet at the top and the base is a polygon

Cone (3D) – Three-dimensional figure that has a flat, usually circular, base joined to a point (vertex) by a curved side with no edges.

Right Triangles (2D) - Triangles in which one angle is a right angle (90°).

Sides:

- 3 sides

Angles:

- 1 right (90°) angle, the other two angles will be 45°

Lines:

- 1 pair of perpendicular lines
- triangles cannot have parallel lines

Acute Triangle (2D) - Triangles in which all 3 angles are acute

Sides:

- 3 sides

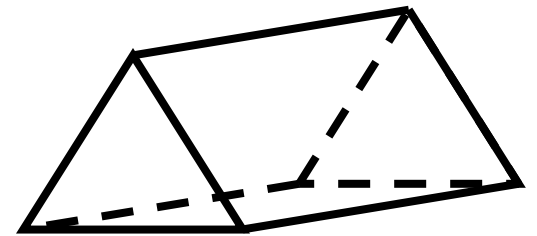
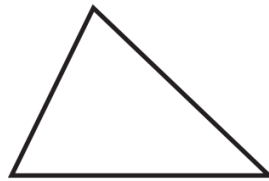
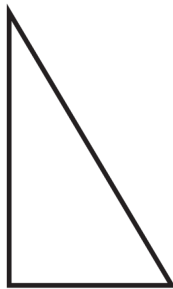
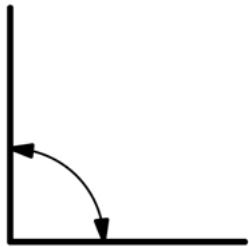
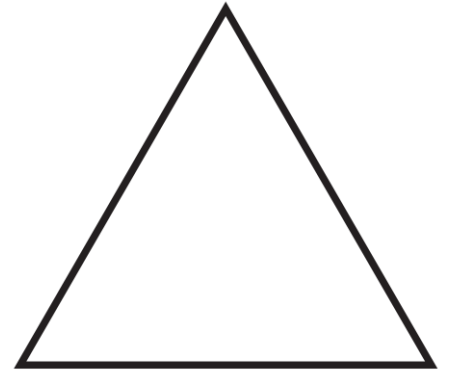
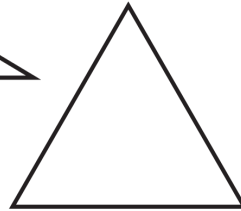
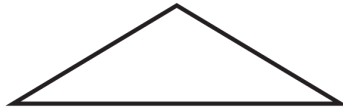
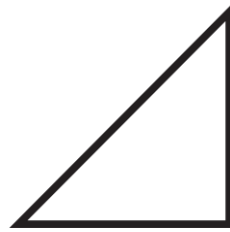
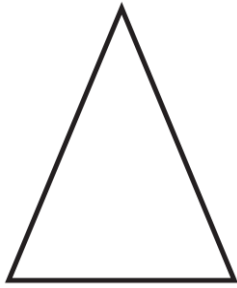
Angles:

- 3 acute angles

Lines:

- No parallel or perpendicular lines

Acute Angle (2D) - An angle that measures less than 90°



Equilateral Triangle (2D)
- A triangle with 3 equal sides and 3 equal angles

Sides: 3 congruent (equal) sides

Angles: 3 congruent (equal) angles, all acute

Lines: No parallel lines

An equilateral triangle is a kind of isosceles triangle. Isosceles triangles have at least 2 equal sides and an equilateral triangle has 3 equal sides.

Isosceles Triangles (2D) -
Triangles with at least 2 equal sides and 2 equal angles.

Sides: 3 sides, at least 2 of the sides are congruent (equal)

Angles: at least 2 of the angles are congruent (equal).

Lines: No parallel lines

Isosceles triangles may be obtuse triangles, right triangles or acute triangles. An equilateral triangle is a kind of isosceles triangle.

Obtuse Triangles (2D) -
Triangles in which one angle measures more than 90°

Sides:

- 3 sides

Angles:

- 1 obtuse angle, the other two will be acute

Lines:

- No parallel or perpendicular lines

Triangular Prism (3D) – A three-dimensional shape made up of two identical triangular bases connected by three rectangular sides.

Scalene Triangles (2D) -
Triangles with no equal sides.

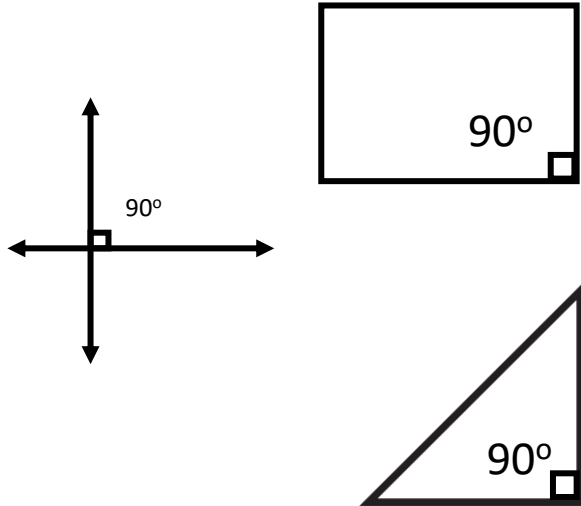
Sides: 3 sides, all of different lengths

Angles:

- Can be obtuse, acute or right angles

Lines: No parallel lines

Right Angle (2D) - An angle that measures exactly 90°



The diagrams show three examples of right angles. The first is a cross formed by two perpendicular lines, with a small square at the intersection and the label 90° . The second is a rectangle with a small square at the bottom-right corner and the label 90° . The third is a right-angled triangle with a small square at the bottom-right corner and the label 90° .