

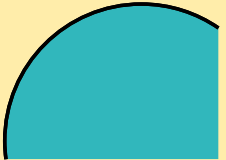


Shapes

The properties of 2D shapes

Properties of 2D Shapes

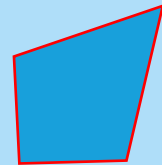
Take a look at some of the language used to describe the properties of 2-dimensional (2D) shapes below:



curved



longer



sides



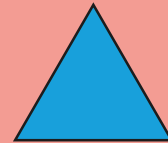
straight



shorter



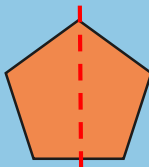
2-dimensional



equal



vertex/vertices



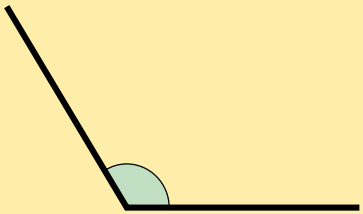
symmetry



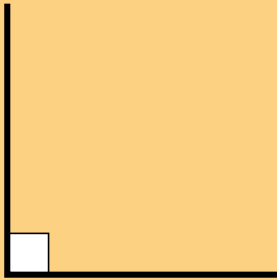
length

Properties of 2D Shapes

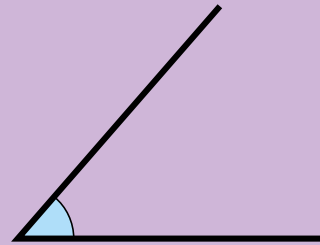
Take a look at some of the language used to describe the properties of 2-dimensional (2D) shapes below:



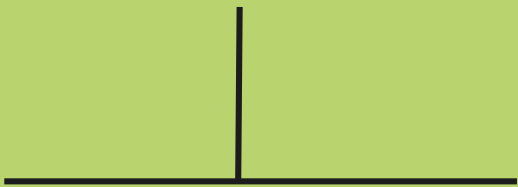
obtuse angle



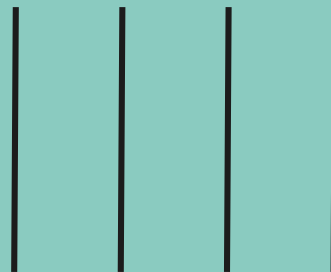
right angle



acute angle



perpendicular lines



parallel lines

circle

How many curved sides?

1 curved side

How many vertices?

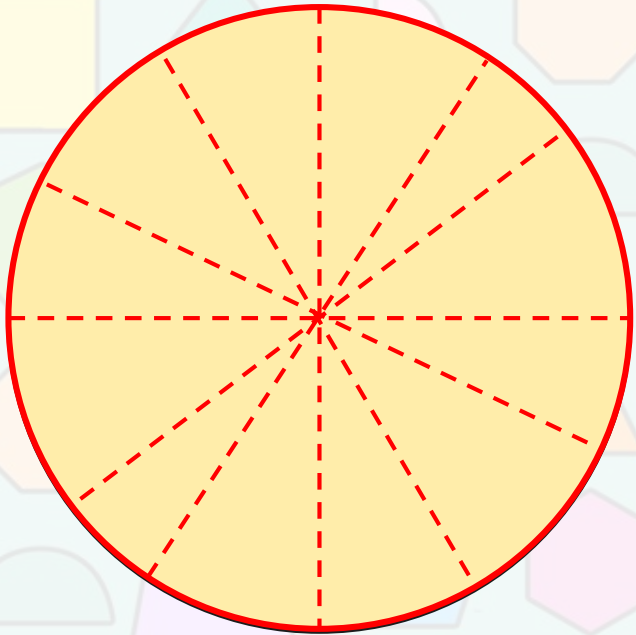
0 vertices

How many lines of symmetry?

almost infinite lines of symmetry

How many pairs of parallel lines?

no pairs of parallel lines



triangle

How many straight sides?

3 straight sides

How many vertices?

3 vertices

How many interior angles?

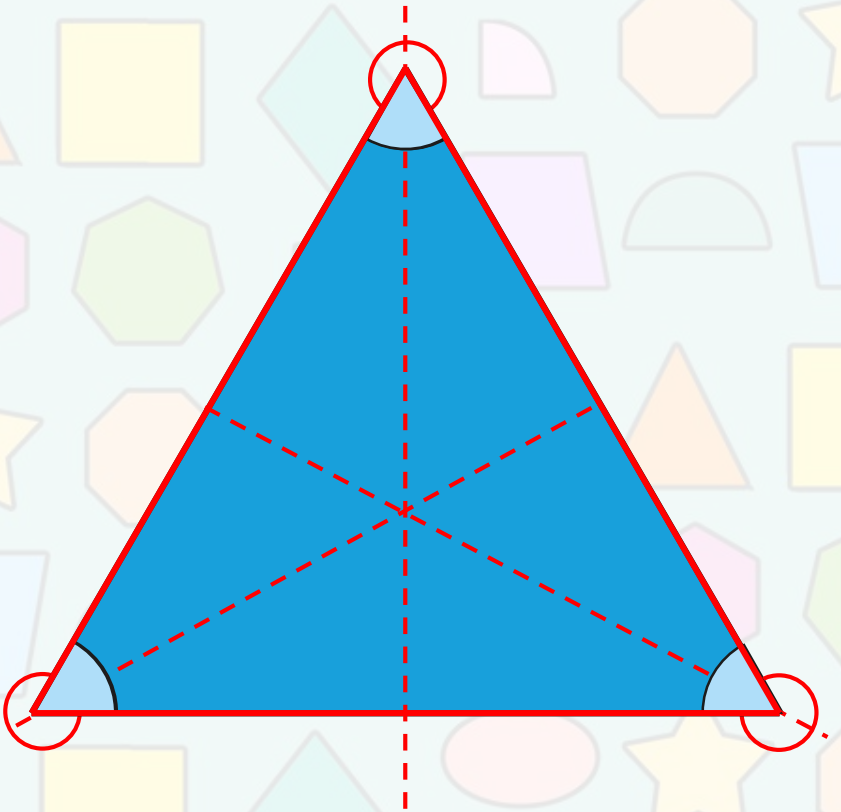
3 interior angles

What type of angles can you see in this shape?

3 acute angles

How many pairs of parallel lines?

no pairs of parallel lines



Quadrilateral: rectangle

How many straight sides?

4 straight sides
2 long sides
2 short sides

How many vertices?

4 vertices

How many lines of symmetry?

2 lines of symmetry

How many interior angles?

4 interior angles

What does each interior angle measure?

each interior angle is 90°

What type of angles can you see in this shape?

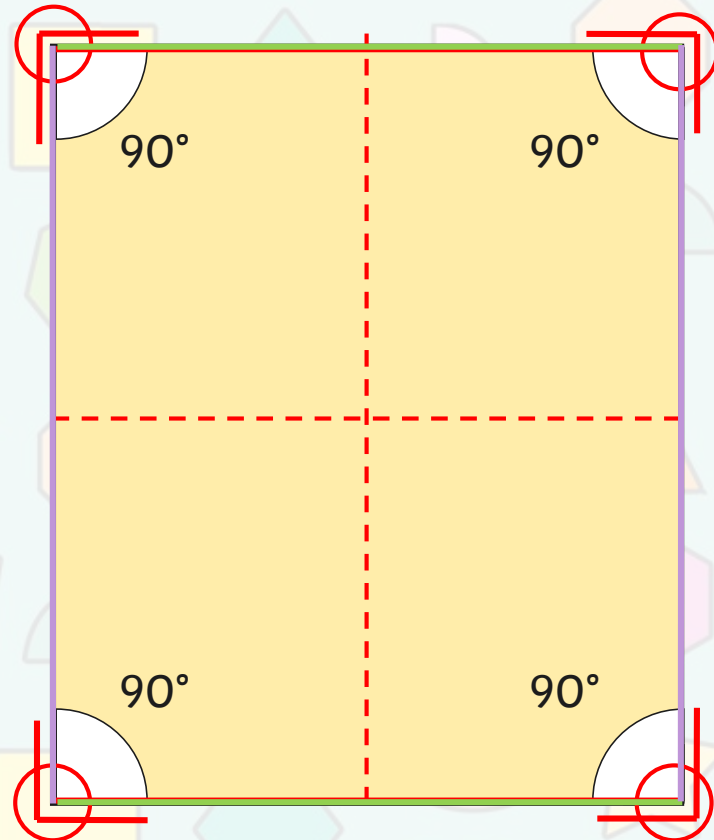
4 right angles

How many pairs of parallel lines?

2 pairs of parallel lines

How many pairs of perpendicular lines?

4 pairs of perpendicular lines



regular pentagon

How many straight sides?

5 straight sides

How many vertices?

5 vertices

How many lines of symmetry?

up to 5 lines of symmetry

How many interior angles?

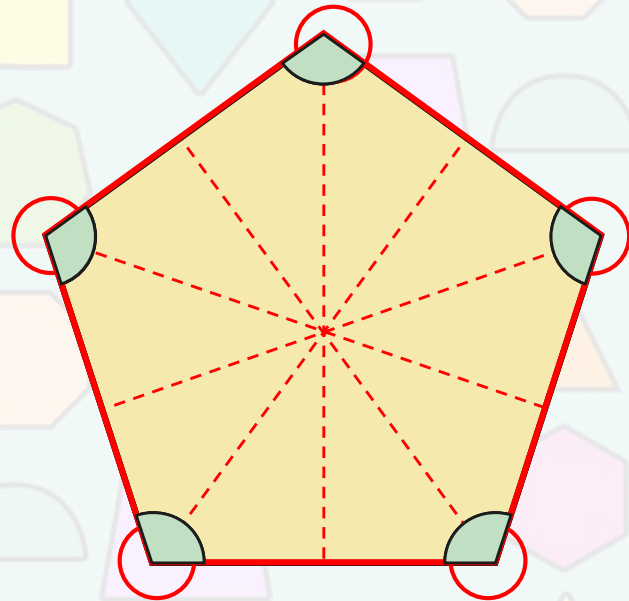
5 interior angles

What type of angles can you see in this shape?

5 obtuse angles

How many pairs of parallel lines?

0 pairs of parallel lines



regular hexagon

How many straight sides?

6 straight sides

How many vertices?

6 vertices

How many lines of symmetry?

up to 6 lines of symmetry

How many interior angles?

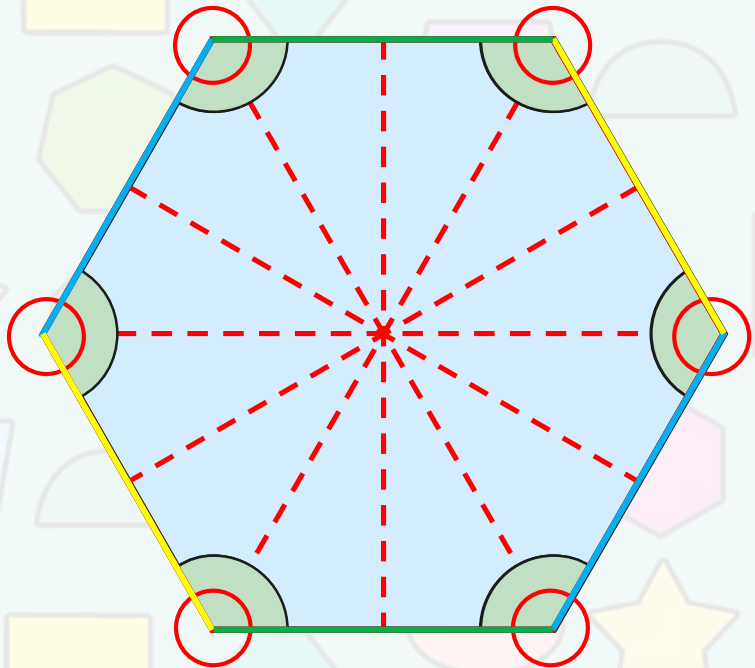
6 interior angles

What type of angles can you see in this shape?

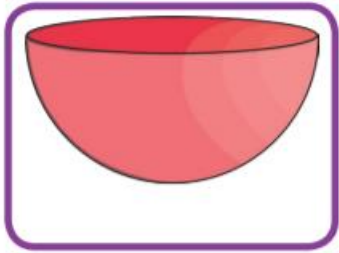
6 obtuse angles

How many pairs of parallel lines?

3 pairs of parallel lines



Properties of 3D Shapes



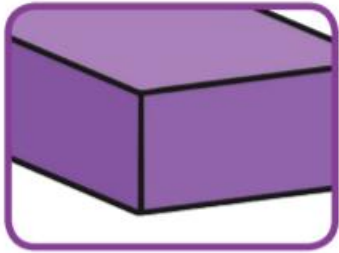
Curved



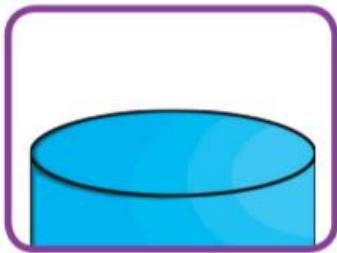
Straight



Edge

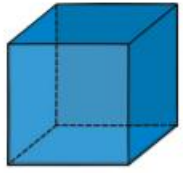


Vertices



Face

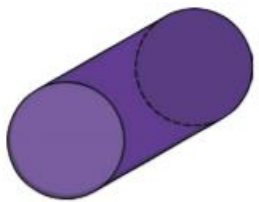
Properties of 3D Shapes



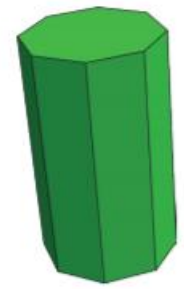
Cube
6 faces
8 vertices
12 edges



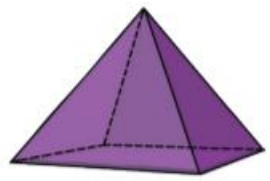
Sphere
1 face
0 vertices
0 edges



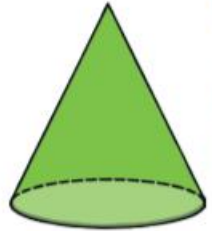
Cylinder
3 faces
0 vertices
2 edges



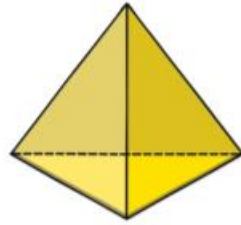
Octagonal Prism
10 faces
16 vertices
24 edges



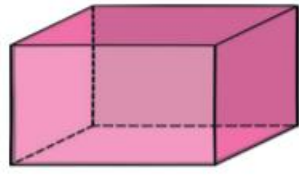
Square-based Pyramid
5 faces
5 vertices
8 edges



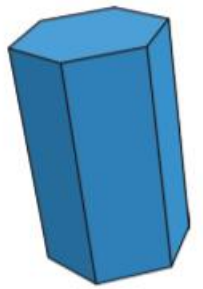
Cone
2 faces
0 vertices
1 edge



Tetrahedron
4 faces
4 vertices
6 edges



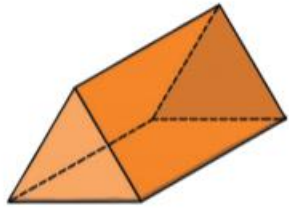
Rectangular Prism
6 faces
8 vertices
12 edges



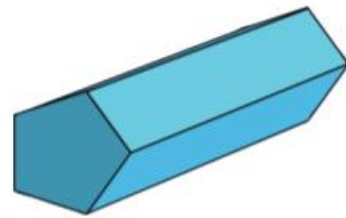
Hexagonal Prism
8 faces
12 vertices
18 edges



Octahedron
8 faces
6 vertices
12 edges



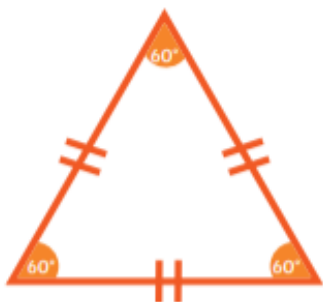
Triangular Prism
5 faces
6 vertices
9 edges



Pentagonal Prism
7 faces
10 vertices
15 edges

Types of Triangle

equilateral



3 equal sides
3 equal angles (60°)

isosceles



2 equal sides
2 equal angles

right angle



One angle is a right angle (90°)
Two other angles add up to 90°
The longest side is called the hypotenuse.

scalene



All sides are different
All angles are different.

Types of Quadrilateral

parallelogram



2 pairs of equal sides
Diagonally opposite angles are equal

trapezium



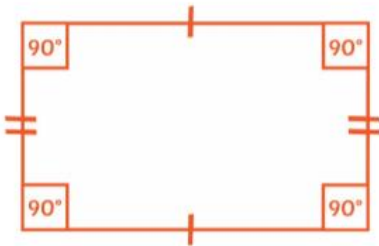
1 pair of sides are parallel

rhombus



All sides are equal
Diagonally opposite angles are equal

rectangle



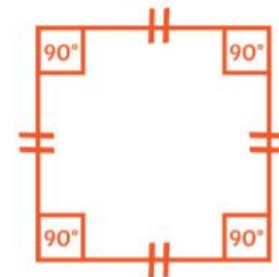
2 pairs of equal parallel sides
4 right angles (90°)

kite

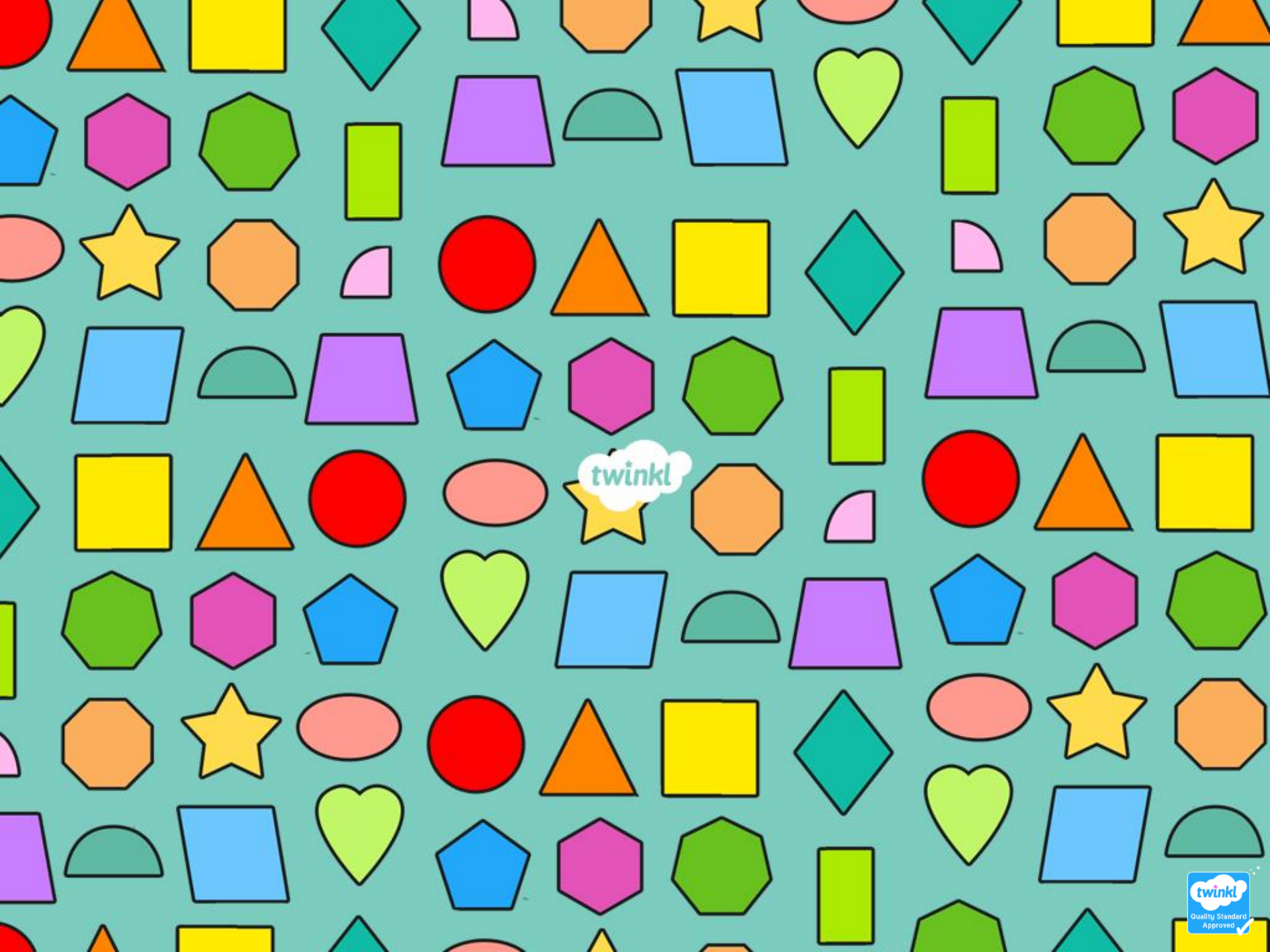


2 pairs of sides of equal length
1 pair of opposite angles is equal.

square



4 equal parallel sides
4 right angles (90°)



twinkl