

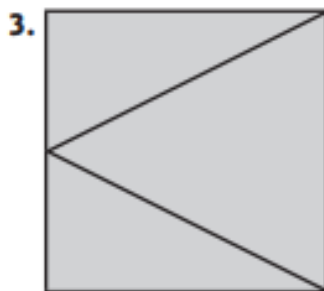
Lesson 4: Classifying triangles

→ pages 102–104

1. a) Circled: 1st and 3rd triangles
 b) Circled: 2nd triangle
 c) Circled: 1st and 4th triangles

2.

■ red ■ blue ■ yellow



4.

	2 or 3 equal sides	No equal sides
2 or 3 equal angles	A, C	
No equal angles		B, D

5. There are 25 isosceles triangles altogether.

Reflect

An equilateral triangle has sides of equal length and all angles of equal size (60°). An isosceles triangle has 2 sides the same length and 2 angles equal in size. A scalene triangle has all sides different lengths and all angles different sizes. A right-angled triangle has 1 angle which is a right angle (90°). Right-angled triangles can be isosceles or scalene.

Lesson 5: Classifying and comparing quadrilaterals

→ pages 105–107

- Circled: rectangle (top left), rhombus (top right), square (bottom left), trapezium (bottom right)
 - Circled: both squares (bottom left, bottom right)
 - Circled: all shapes except the square
- Answers will vary but must include 2 squares and 4 non-square quadrilaterals (orientation will vary).
- Shapes matched:
 - Trapezium → bottom shape
 - Rhombus → 3rd shape from top (a square is a special sort of rhombus)
 - Parallelogram → top shape and 3rd shape from top (a square is a special sort of parallelogram)
 - Rectangle → 2nd shape from top and 3rd shape from top (a square is a special sort of rectangle)
- Check children have drawn four different parallelograms.

Reflect

A rhombus has 4 equal sides but can have different sized angles. A square is a type of rhombus but with angles of equal size (right angles or 90°).

Lesson 6: Deducing facts about shapes

→ pages 108–110

- Circled: rectangle (3rd shape), triangle (4th shape)
 - Circled: parallelogram (2nd shape), rectangle (3rd shape), trapezium (4th shape)
 - Circled: parallelogram (1st shape), right-angled triangle (2nd shape), right-angled triangle (5th shape)
 - Circled: trapezium (3rd shape), triangle (4th shape), parallelogram (5th shape)
- Different answers are possible including irregular pentagons, irregular octagons, irregular dodecagons (12-sides).
- It could be an equilateral triangle (all angles 60°) or a scalene triangle.
- It could be a parallelogram, a rhombus, a trapezium, a kite, an arrow-head or a quadrilateral with all sides and angles different. It cannot be a square or a rectangle since these shapes only have right angles.
- Headings in top row left to right:
Quadrilateral Not quadrilateral
Headings in left-hand column top to bottom:
Angles not all equal Angles all equal

Reflect

Answers will vary. Children should recognise that they need to consider the properties of its sides, i.e. how many sides and whether they are equal in length and parallel. They should also consider the properties of its angles, i.e. whether they are equal in size, acute/obtuse or right angles.

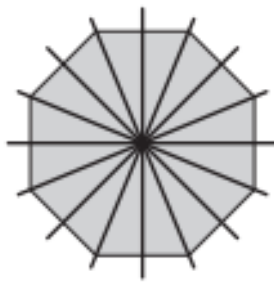
Lesson 7: Lines of symmetry inside a shape

→ pages 111–113

1. a)



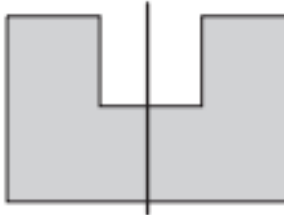
c)



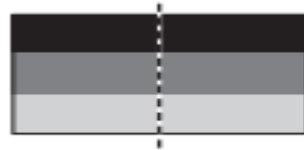
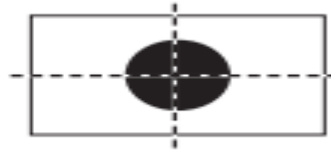
b)



d)



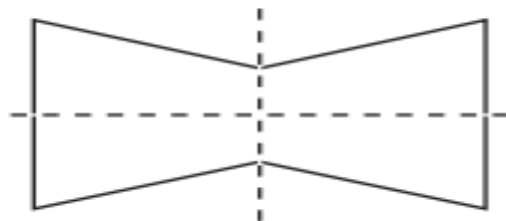
2. (No line of symmetry)



3. Shapes drawn into table:

	Regular	Irregular
4 or more lines of symmetry	Square Regular hexagon Regular octagon	
Fewer than 4 lines of symmetry	Equilateral triangle	Parallelogram Rectangle

4. Answers will vary; for example:



5. Answers will vary; for example:

- Isosceles trapezium
- Rhombus
- Equilateral triangle

Reflect

Answers may vary but should include that there are infinite lines of symmetry; for example:

If you fold a circle along any line which goes through its centre, the 2 halves match exactly. There are an infinite number of such lines so a circle has infinite lines of symmetry.