Basic Symmetry

Name:	Class:	Date:

Mark	/ 12	%

1) Complete the table to show the line and rotational symmetry of quadrilaterals.

Quadrilaterals	Number of Lines of Symmetry	Order of Rotational Symmetry
Square		
Rectangle		
Parallelogram		
Rhombus		
Kite		

[1]

2) Complete the table to show the line and rotational symmetry of regular polygons.

| Regular Polygons	Number of Lines of Symmetry	Order of Rotational Symmetry
Nonagon		
Octagon		
Triangle		
Heptagon		
Square		
Hexagon		
Decagon		
Pentagon		

[1]

3) Complete the table to show the line and rotational symmetry of triangles.

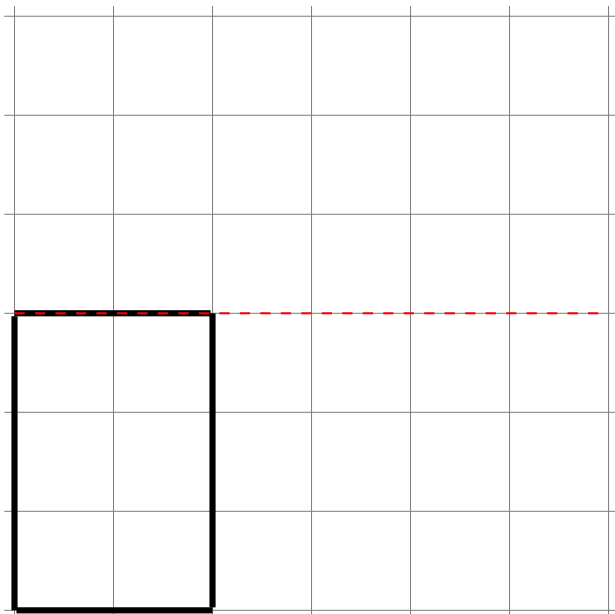| Type of Triangle	Number of Lines of Symmetry	Order of Rotational Symmetry
Scalene		
Isosceles		
Equilateral		

[1]

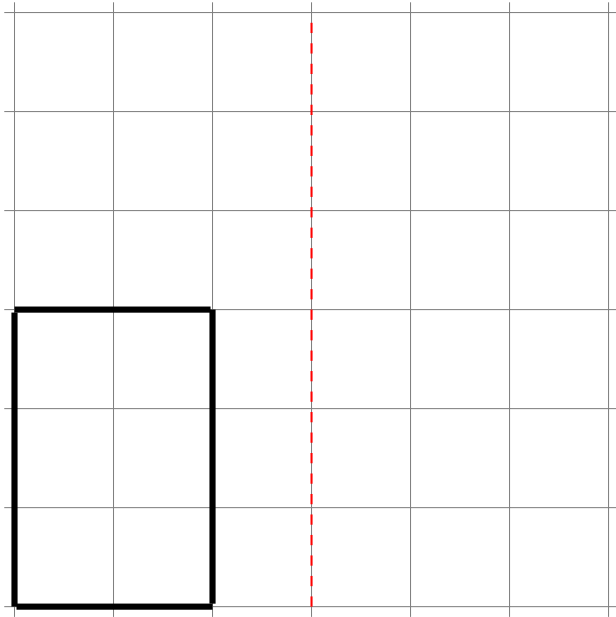**4)** Find the number of lines of symmetry for the isosceles triangle below. [1]
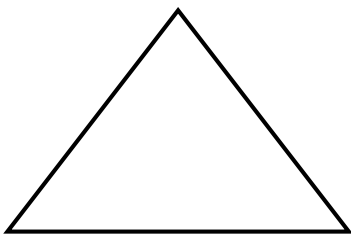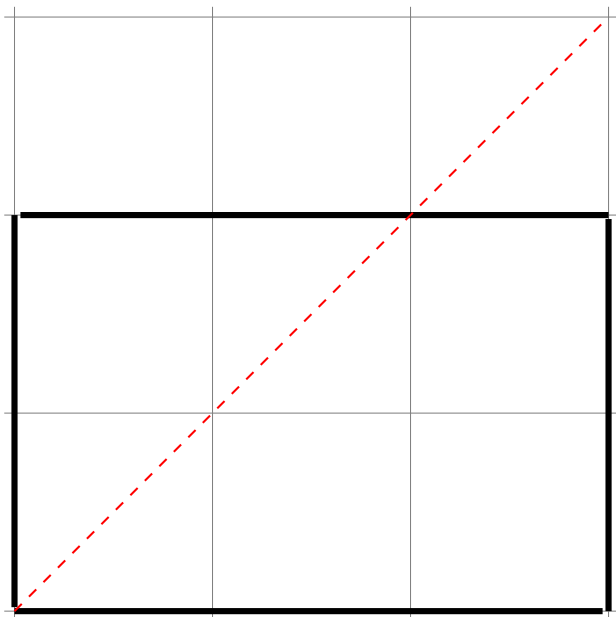
5) Reflect the shape in the dotted line.

[1]

6) Reflect the shape in the dotted line.
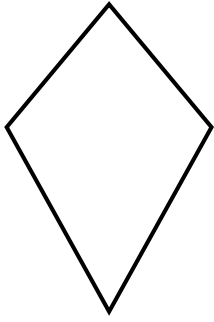
[1]

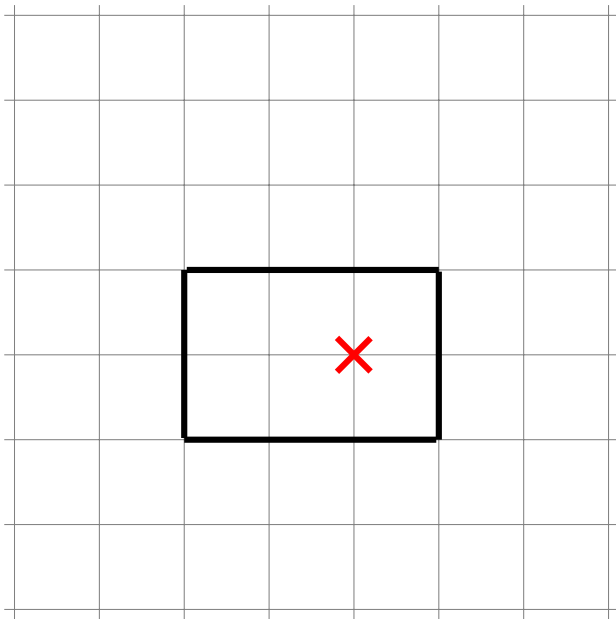**7)** Reflect the shape in the dotted line.

[1]

8) Give the order of rotational symmetry of the kite below.   [1]
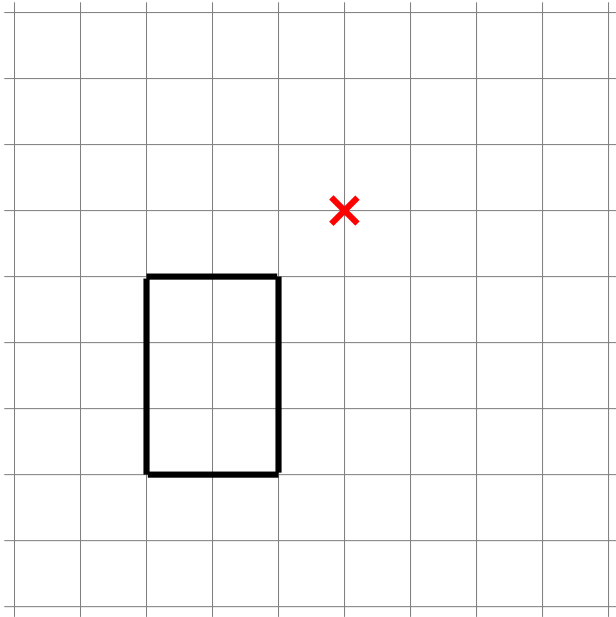

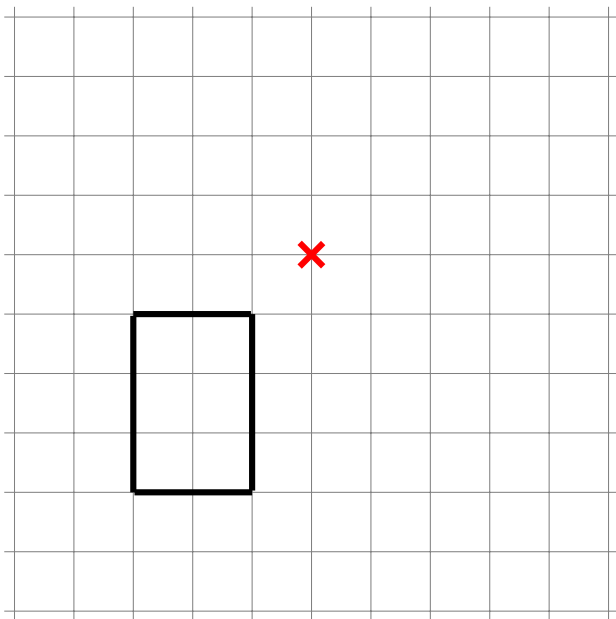**9)** Rotate the shape 90° clockwise about the centre marked with a cross.

[1]

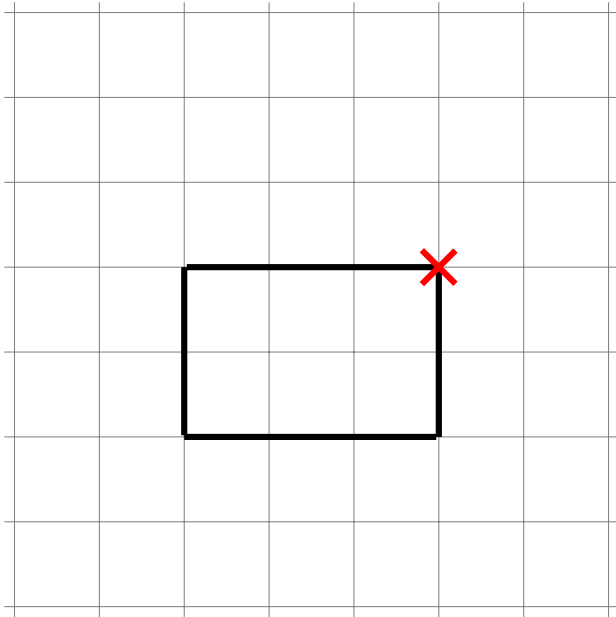**10)** Rotate the shape 90° anti-clockwise about the centre marked with a cross.

[1]

11) Rotate the shape 180° about the centre marked with a cross.

[1]

12) Rotate the shape 90° anti-clockwise about the centre marked with a cross.

[1]

Solutions for the assessment Basic Symmetry

1)
Square: 4, 4
Rectangle: 2, 2
Parallelogram: 0, 2
Rhombus: 2, 2
Kite: 1, 1

2)
Nonagon: 9,9
Octagon: 8,8
Triangle: 3,3
Heptagon: 7,7
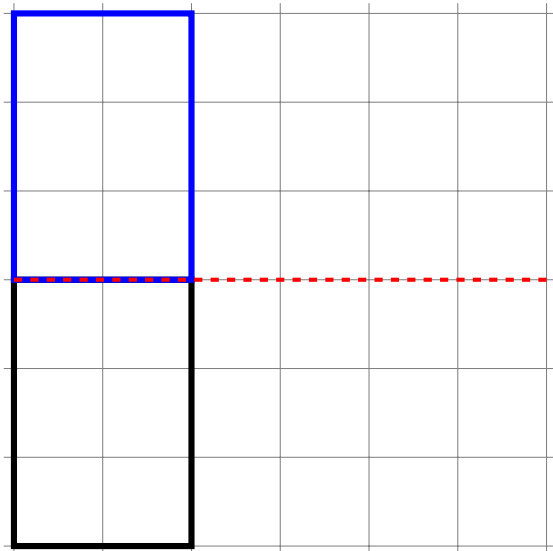Square: 4,4
Hexagon: 6,6
Decagon: 10,10
Pentagon: 5,5

3)
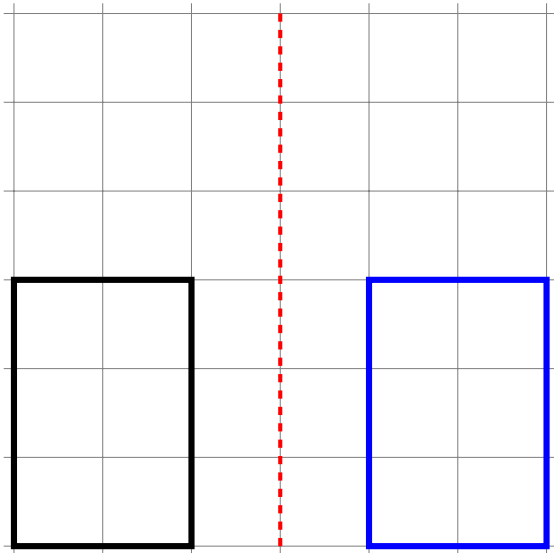Scalene Triangle: 0, 1
Isosceles Triangle: 1, 1
Equilateral Triangle: 3, 3
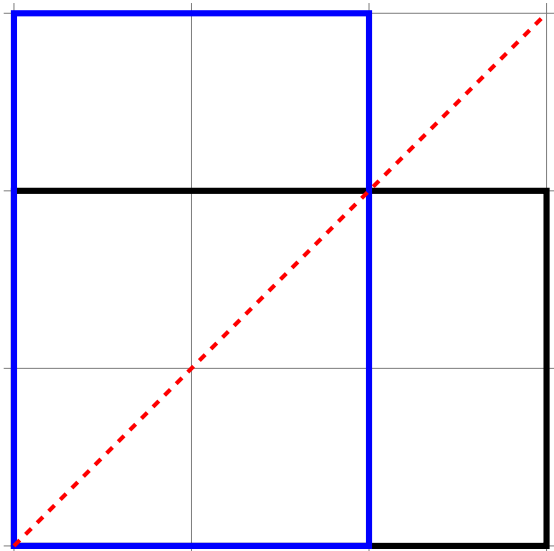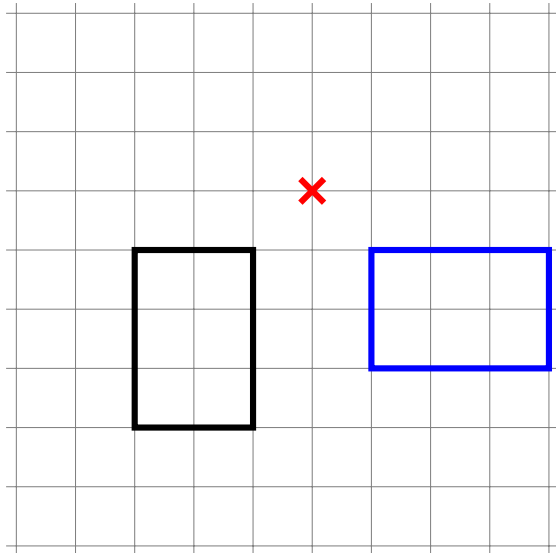
4) Number of lines of symmetry = 1

5)

6)

7)

8) Order of rotational symmetry = 1

9)

10)

11)

12)