Tessellated Designs

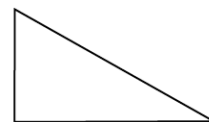NAME: ....

CLASS: ....

DATE: ....

Basic

1) Name the following triangles:

2) Name the following quadrilaterals:
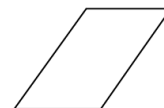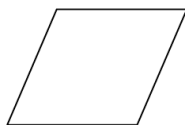
3) Name the following polygons:

Basic

4) For each shape in question 1 and 2, mark:

a) the equal angles   b) the equal sides   c) the parallel lines
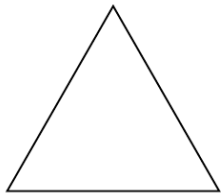
5) Reflect the shape about the dotted line.
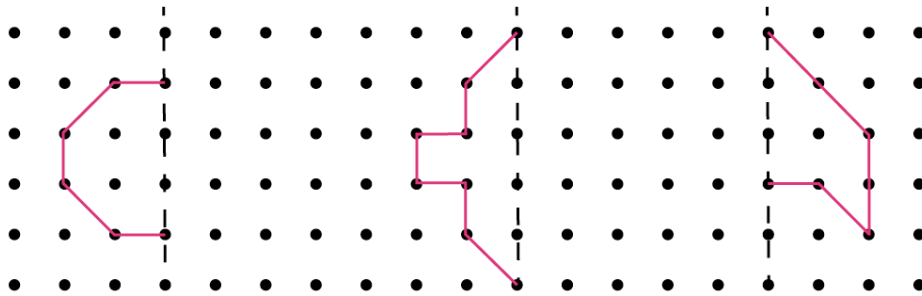
Tessellated Designs

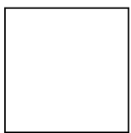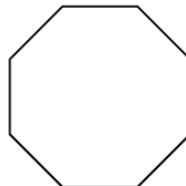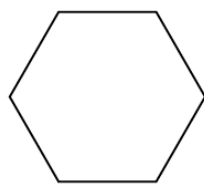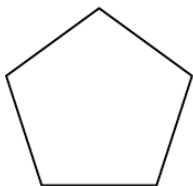NAME: ....

CLASS: ....

DATE: ....

Core

1) Complete the following table by filling in the appropriate properties of each shape.

	Square	Rhombus	Rectangle	Parallelogram	Pentagon	Hexagon
Axes of symmetry						
Order of rotation						
All sides equal						
Opposite sides equal						
Opposite sides parallel						
All angles equal						
Opposite angles equal						

2) In the diagram below, the y-axis is a line of symmetry. Give the coordinates of point B and point D.

Tessellated Designs

NAME: ....

CLASS: ....

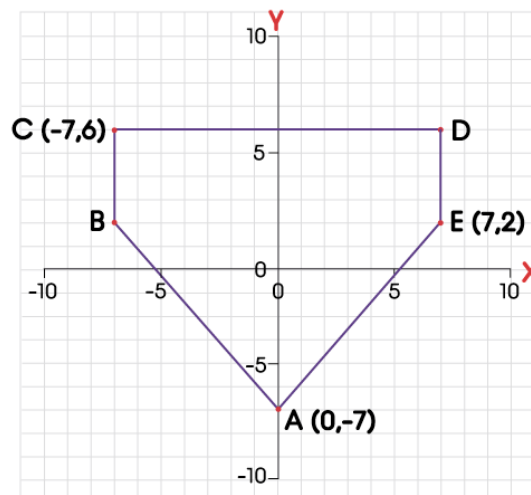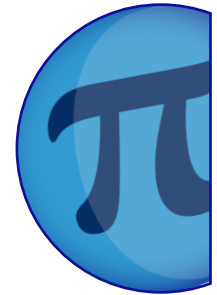DATE: ....

Advanced

1) Complete the following table by filling in the appropriate properties of each shape.

	Square	Rhombus	Rectangle	Parallelogram	Pentagon	Hexagon
Axes of symmetry						
Order of rotation						
All sides equal						
Opposite sides equal						
Opposite sides parallel						
All angles equal						
Opposite angles equal						

2) Complete the following table.

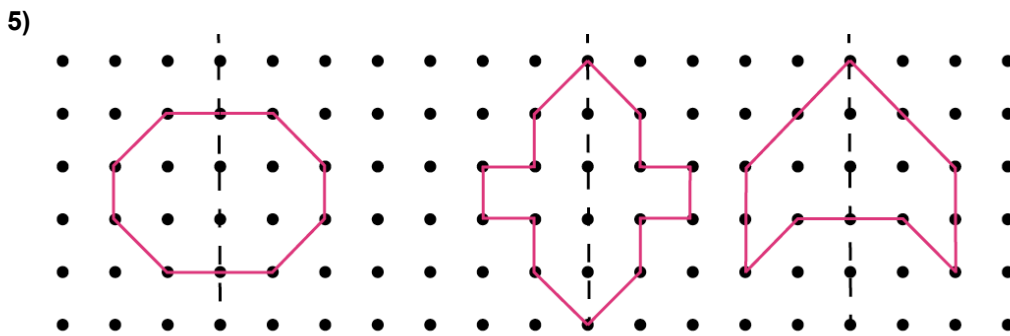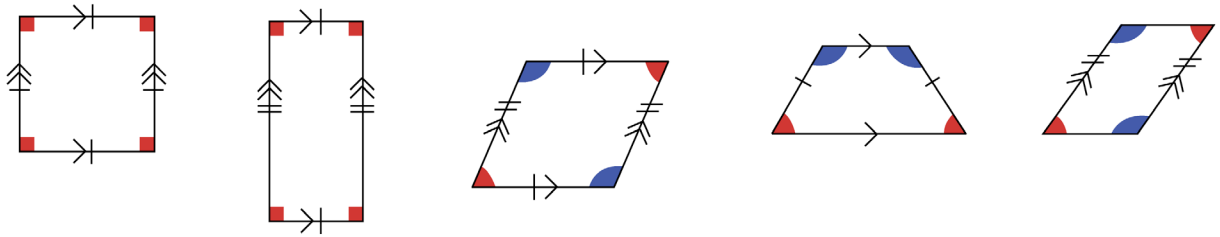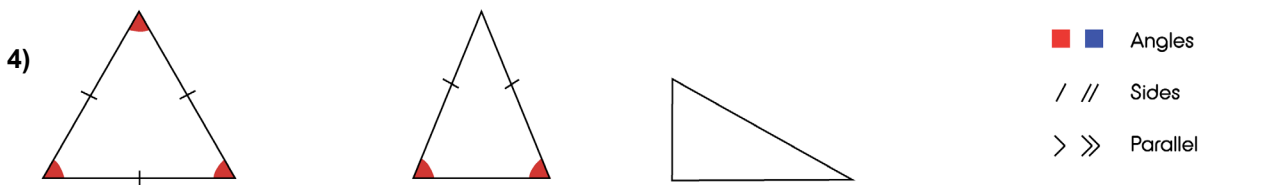| Name of shape	Number of sides	Size of exterior angle	Size of interior angle	Sum of all interior angles
Equilateral triangle				
Square				
Pentagon				
Hexagon				
Octagon				

ANSWERS

Basic

1) Equilateral triangle; isosceles triangle; right angle triangle.

2) Square; rectangle; rhombus; trapezium; parallelogram.

3) Pentagon; hexagon; octagon.

4)

🟥 🟦	Angles
/ //	Sides
〉 》	Parallel

5)

ANSWERS

Core

1)

	Square	Rhombus	Rectangle	Parallelogram	Pentagon	Hexagon
Axes of symmetry	4	2	2	0	5	6
Order of rotation	4	2	2	2	5	6
All sides equal	Yes	Yes	No	No	Yes	Yes
Opposite sides equal	Yes	Yes	Yes	Yes	No	Yes
Opposite sides parallel	Yes	Yes	Yes	Yes	No	Yes
All angles equal	Yes	No	Yes	No	Yes	Yes
Opposite angles equal	Yes	Yes	Yes	Yes	Yes	Yes

2) B (-7, 2); D (7, 6)

Tessellated Designs

Advanced

1)

	Square	Rhombus	Rectangle	Parallelogram	Pentagon	Hexagon
Axes of symmetry	4	2	2	0	5	6
Order of rotation	4	2	2	2	5	6
All sides equal	Yes	Yes	No	No	Yes	Yes
Opposite sides equal	Yes	Yes	Yes	Yes	No	Yes
Opposite sides parallel	Yes	Yes	Yes	Yes	No	Yes
All angles equal	Yes	No	Yes	No	Yes	Yes
Opposite angles equal	Yes	Yes	Yes	Yes	Yes	Yes

2)

Name of shape	Number of sides	Size of exterior angle	Size of interior angle	Sum of all interior angles
Equilateral triangle	3	120	60	180
Square	4	90	90	360
Pentagon	5	72	108	540
Hexagon	6	60	120	720
Octagon	8	45	135	1080