

Name:

Exam Style Questions

Tessellations



Equipment needed: Pencil, Ruler and Pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

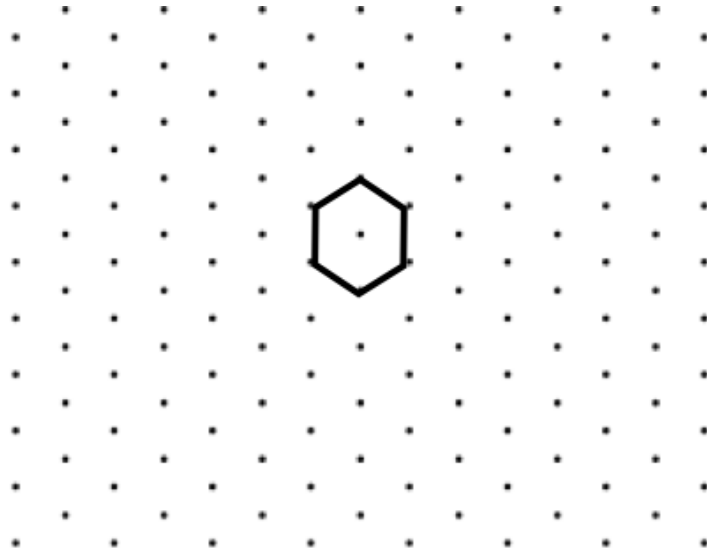
Video 36



Answers and Video Solutions



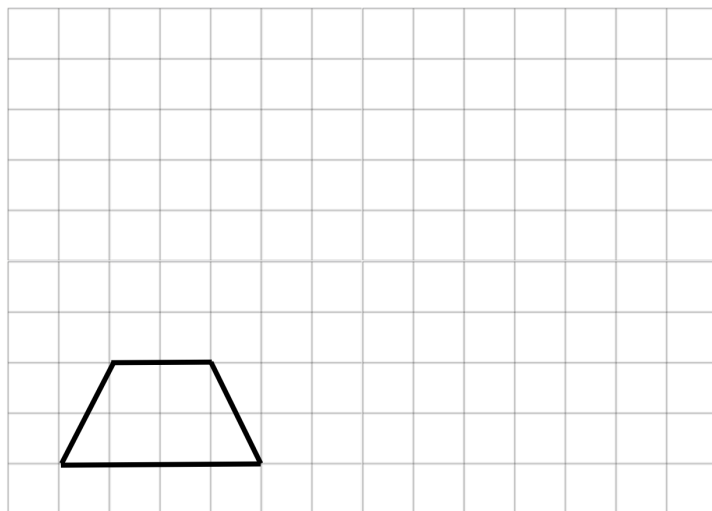
1. A regular hexagon is drawn below.



On the grid above, show how the hexagon tessellates.
You should draw at least 8 shapes.

(2)

2. A quadrilateral is drawn below.



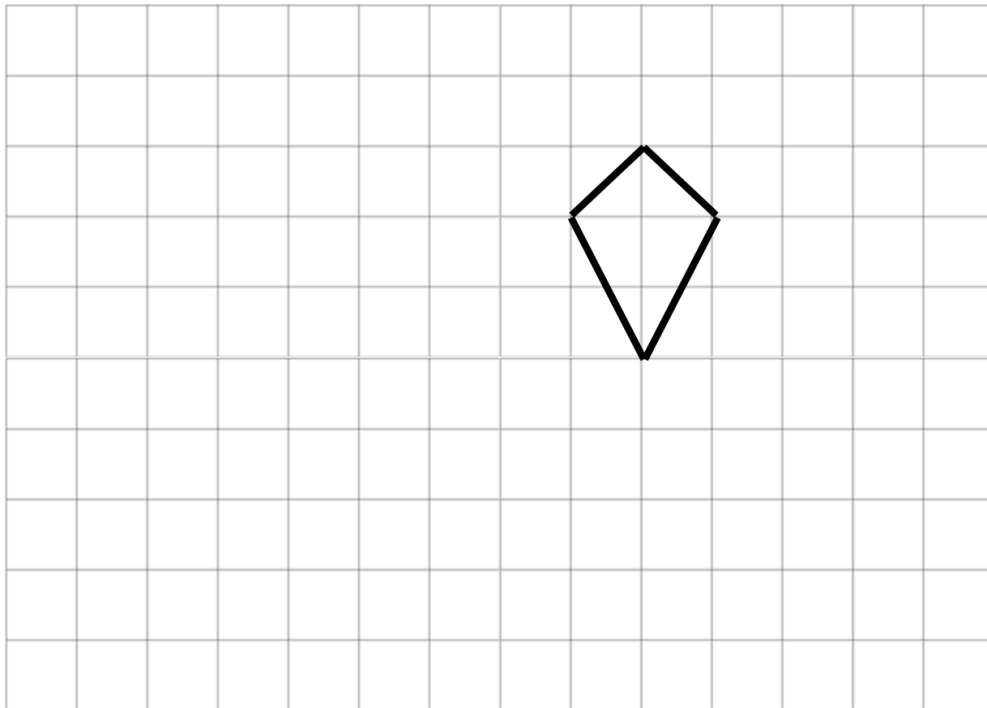
(a) What is the name of the quadrilateral?

.....
(1)

(b) On the grid above, show how the quadrilateral tessellates.
You should draw at least 8 shapes.

(2)

3. A quadrilateral is drawn below.



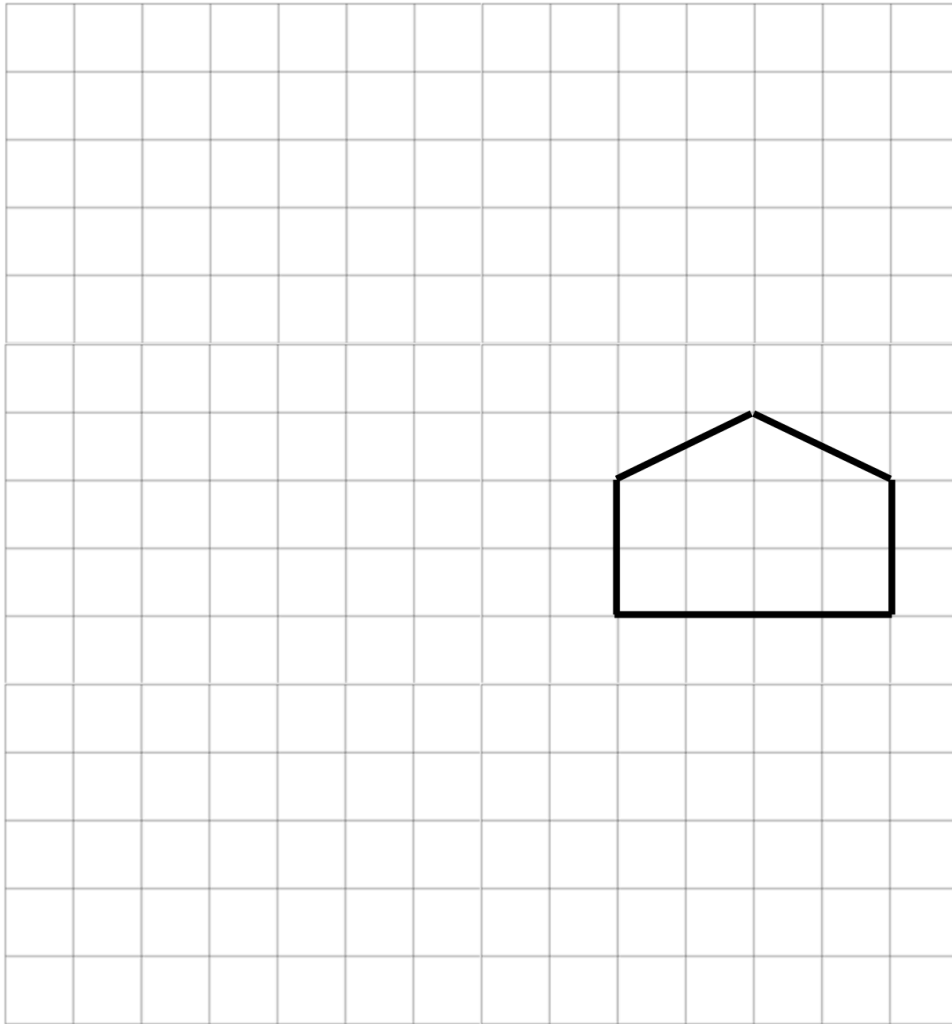
(a) What is the name of the quadrilateral?

.....
(1)

(b) On the grid above, show how the quadrilateral tessellates.
You should draw at least 8 shapes.

(2)

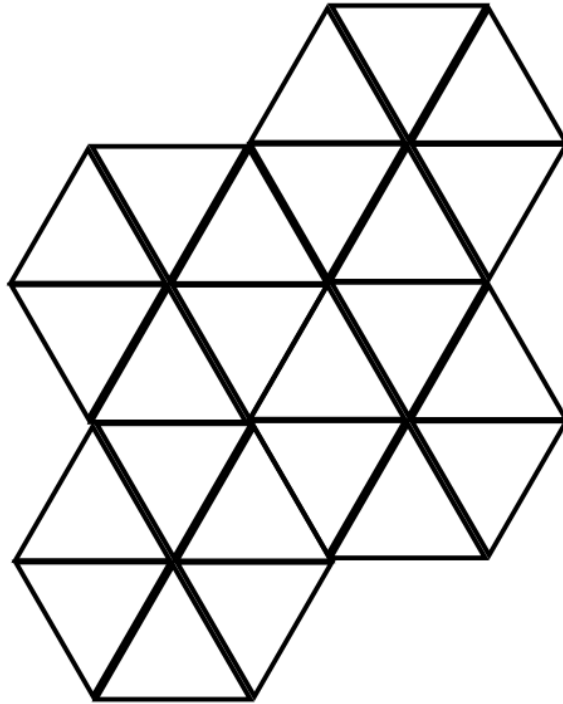
4. A pentagon is drawn on the grid below.



Show how the pentagon will tessellate.
You should draw at least 6 pentagons.

(2)

5. Here is a tessellating pattern made from equilateral triangles.



(a) Write down the size of each interior angle in the equilateral triangle.

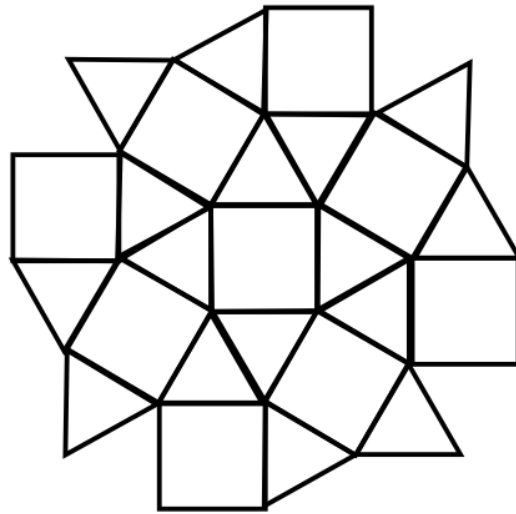
.....^o
(1)

(b) Explain why equilateral triangles tessellate.

.....
.....
.....

(2)

6. Here is a tessellating pattern made from equilateral triangles and squares.



(a) Write down the size of each interior angle in the equilateral triangle.

.....^o
(1)

(b) Write down the size of each interior angle in the square.

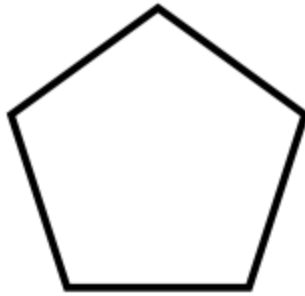
.....^o
(1)

(c) Explain why equilateral triangles and squares can form a pattern that tessellates.

.....
.....
.....

(3)

7. Shown is a regular pentagon.



(a) What is the size of each interior angle?

.....⁰
(2)

James says a tessellating pattern can be formed from using only regular pentagons.

Is he correct? Explain your answer.

.....
.....
.....

(3)

8. Shown is a regular hexagon.



(a) What is the size of each interior angle?

.....⁰
(2)

Emma says a tessellating pattern can be formed from using only regular hexagons.

Is she correct? Explain your answer.

.....
.....
.....

(3)

9. Circle the shape that tessellates.



regular heptagon

regular hexagon

regular octagon

regular decagon

(1)