

Name: \_\_\_\_\_

Exam Style Questions

# Tessellations



Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

## Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

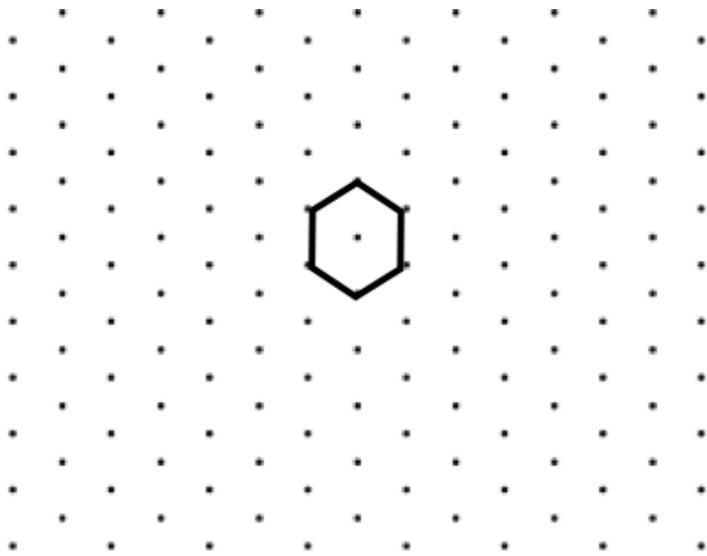
Revision for this topic

[www.corbettmaths.com/contents](http://www.corbettmaths.com/contents)

## Video 36



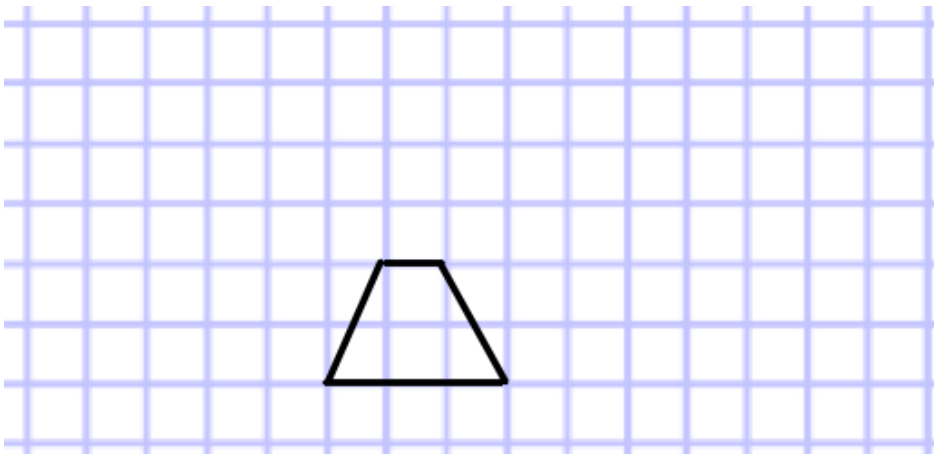
1. A regular hexagon is drawn below.



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

(2)

2. A quadrilateral is drawn below.



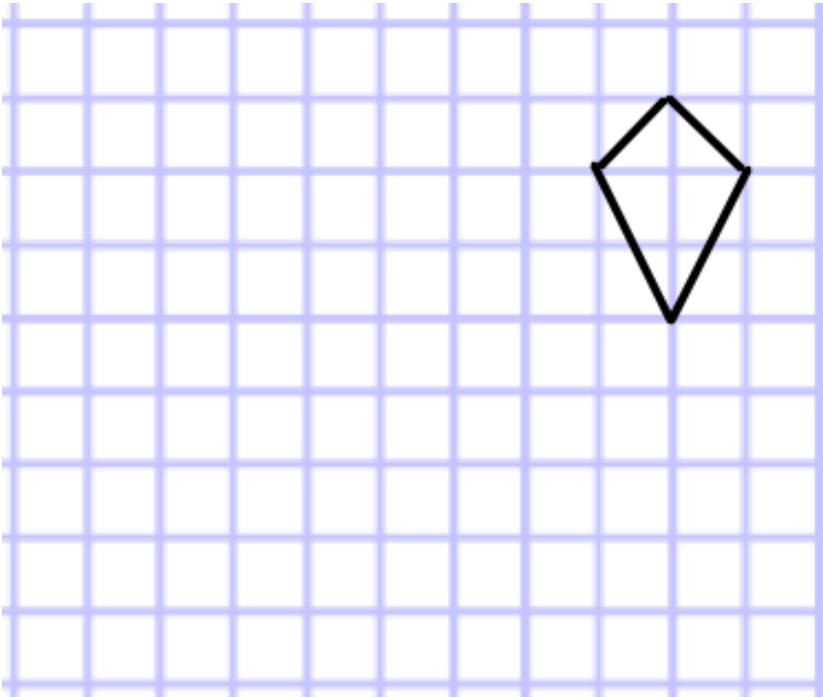
(a) What is the name of the quadrilateral?

.....  
(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.



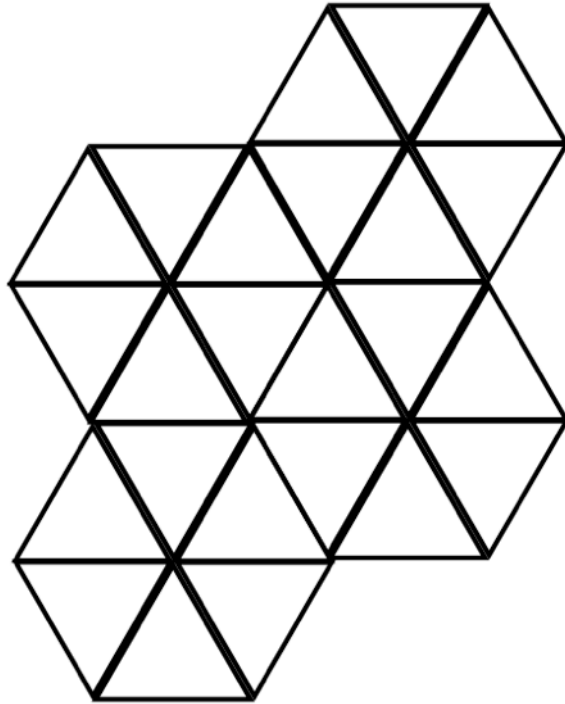
(a) What is the name of the quadrilateral?

.....  
(1)

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

(2)

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



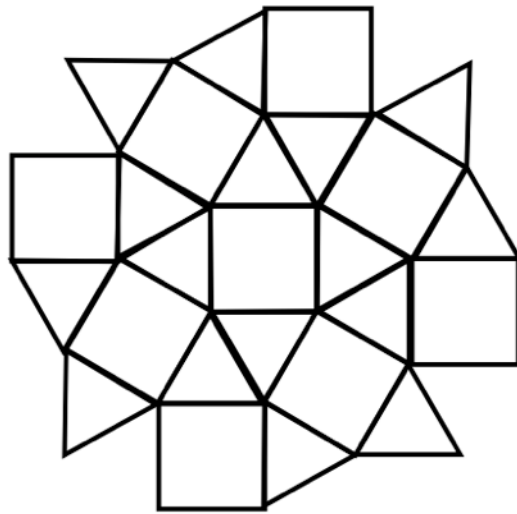
(a) Write down the size of each interior angle in the equilateral triangle.

.....<sup>o</sup>  
**(1)**

(b) Explain why equilateral triangles tessellate.

**(2)**

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



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

.....<sup>o</sup>  
**(1)**

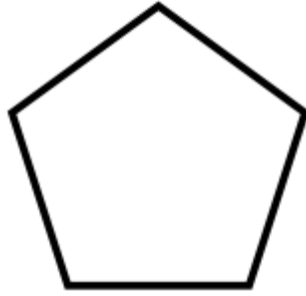
(b) Write down the size of each interior angle in the square.

.....<sup>o</sup>  
**(1)**

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

**(3)**

6. Shown is a regular pentagon.



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

.....<sup>o</sup>  
**(2)**

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

Is he correct? Explain your answer.

**(3)**

7. Shown is a regular hexagon.



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

.....<sup>0</sup>  
**(2)**

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

Is he correct? Explain your answer.

**(3)**