

# Interior and Exterior Angles - regular polygons

Name:

Class:

Date:

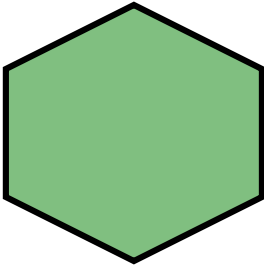
Mark

/ 8

%

1) Find the interior angle sum of the polygon shown below

[1]



2) Find one interior angle of a regular polygon with 7 sides, giving your answer to 3 significant figures where necessary

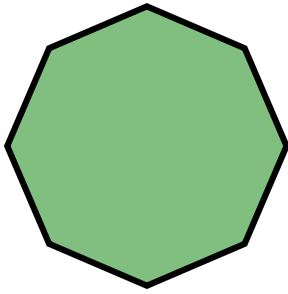
[1]

3) Find the exterior angle sum of the polygon shown below

[1]



4) Find one exterior angle of the regular polygon shown below, giving your answer to 3 significant figures where necessary



5) One exterior angle of a regular polygon is  $36^\circ$ . Find the number of sides of the polygon. [1]

6) One interior angle of a regular polygon is  $135^\circ$ . Find the number of sides of the polygon. [1]

7) Complete the sentence below: [1]

4 equilateral triangles and ..... hexagon(s) will tessellate together.

8) Complete the sentence below with the name of a regular polygon: [1]

2 regular octagons and 1 ..... will tessellate together.

**Solutions for the assessment Interior and Exterior Angles - regular polygons**

1) Interior angle sum =  $720^\circ$

2) Interior angle =  $129^\circ$

3) Exterior angle sum =  $360^\circ$

4) Exterior angle =  $45^\circ$

5)  $n = 10$

6)  $n = 8$

7) 1

8) square