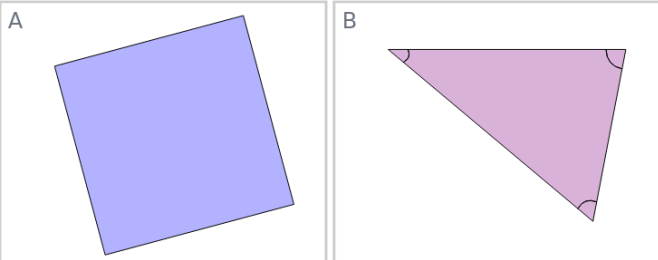


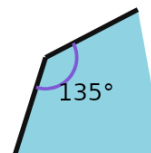


Apply the interior angle-sum relationship for polygons

1
3 sides

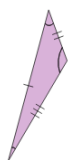


2
This is the 135° interior angle of a regular polygon. What type of polygon is it?



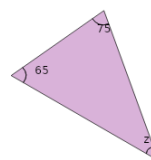
- | | | |
|------------|-----------------|-----------|
| A Octagon | B Quadrilateral | C Hexagon |
| D Pentagon | E Triangle | |

3
What would the sum of the inside angles on this shape be?



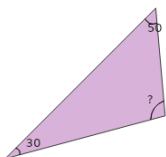
- | | | |
|---------------|---------------|---------------|
| A 90° | B 270° | C 120° |
| D 180° | E 240° | F 150° |

4
What is known about the angles labelled 75, 65, z



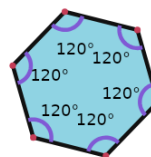
- | | | |
|---------------------------------------|---------------------------------------|----------------------------|
| A 75, 65, and z add up to 180° | B 75, 65, and z add up to 360° | C 75 and 65 add to twice z |
| D 75 and 65 add to z | E z and 65 add to 75 | F 75 is the same as 65 |

5
Find the equation that will help you calculate the missing angle of the triangle



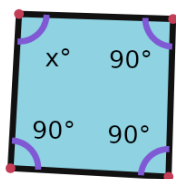
- | | | |
|-----------------------|-----------------------|--------------------------|
| A $50 - 30 - ? = 360$ | B $50 + 30 + ? = 180$ | C $2(50 + 30 + ?) = 180$ |
| D $50 + 30 + ? = 360$ | E $50 + 30 + ? = 90$ | |

6
What is the rule for the sum of the interior angles of a polygon?



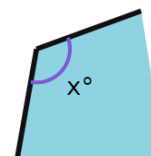
- | | | |
|---|---------------------------------|--|
| A All angles sum to 720° | B All angles sum to 180° | C All angles sum to 270° |
| D All interior angles sum to $(6 - 2) \times 180^\circ$ | E All angles sum to 540° | F All angles sum to $(6 - 3) \times 180^\circ$ |

7
What is the missing interior angle?



- | | | |
|--------------|---------------|---------------|
| A 30° | B 110° | C 130° |
| D 90° | E 150° | F 50° |

8
This is a regular hexagon. What is the interior angle?



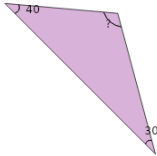
- | | | |
|---------------|---------------|---------------|
| A 90° | B 135° | C 108° |
| D 120° | E 60° | |



Apply the interior angle-sum relationship for polygons

9

Find the missing angle of the triangle given that the interior angles must add up to 180°



A 110

B 100

C 90

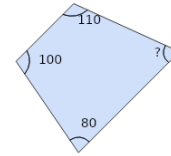
D 130

E 120

F 140

10

Find the missing angle of the trapezoid given that the interior angles must add up to 360°



A 58

B 54

C 70

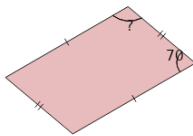
D 66

E 86

F 50

11

Find the missing angle of the parallelogram given that the interior angles must add up to 360°



A 140

B 130

C 110

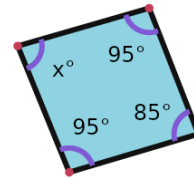
D 100

E 90

F 120

12

What is the missing interior angle?

A 125° B 105° C 145° D 85° E 25° F 45°