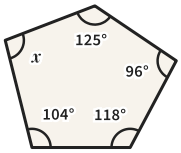
Interleaved: angles in polygons

1

Find the size of angle x.



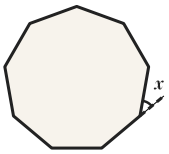
Which method? Interior angle sum | Exterior angle sum | Angles on a straight line

$(5-2) \times 180 = 540$, $540 - 443 = 97$

Answer $97°$

2

The diagram shows a regular nonagon with one side carried on. Find the size of angle x.

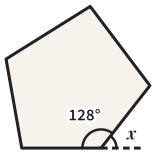


Which method? Interior angle sum | Exterior angle sum | Angles on a straight line

Answer

3

One side of this pentagon is carried on. Find the size of angle x.



Which method? Interior angle sum | Exterior angle sum | Angles on a straight line

Answer

4

Part of a regular polygon is shown.
Each exterior angle is 24°. How many sides does the polygon have?

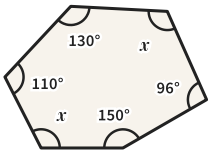


Which method? Interior angle sum | Exterior angle sum | Angles on a straight line

Answer

5

Two of the angles in this hexagon are equal. Find the size of angle x.

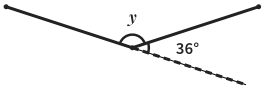


Which method? Interior angle sum | Exterior angle sum | Angles on a straight line

Answer

6

Part of a regular polygon is shown.
Each exterior angle is 36°. Find the size of angle y.



Which method? Interior angle sum | Exterior angle sum | Angles on a straight line

Answer

7

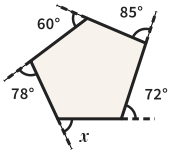
The interior angles of a polygon add up to 1260°. How many sides does the polygon have?

Which method? Interior angle sum | Exterior angle sum | Angles on a straight line

Answer

8

Each side of this pentagon is carried on. Find the size of angle x.



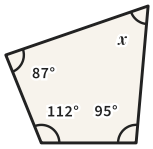
Which method? Interior angle sum | Exterior angle sum | Angles on a straight line

Answer

Interleaved: angles in polygons *further practice*

9

Find the size of angle x.



Answer

10

A regular polygon has 20 sides.
Work out the size of each exterior angle.

Answer

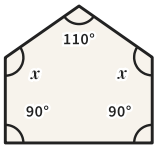
11

Work out the size of each interior angle of a regular polygon with 12 sides.

Answer

12

The end wall of a shed is a pentagon.
It has a right angle at each corner on the ground and an angle of 110° at the top.
The other two angles are equal.
Find one of them.



Answer

13

A robot drives in a straight line, turns 30° to the left, and does the same again and again until it is back where it started.
Its path is a regular polygon.
How many sides does it have?

Answer

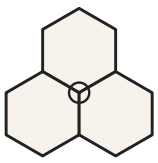
14

Each interior angle of a regular polygon is 140°. How many sides does the polygon have?

Answer

15

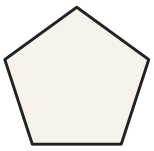
A floor is tiled with regular hexagons.
Three tiles meet at each corner.
Explain why there are no gaps.



Answer

16

Sam says each interior angle of a regular pentagon is $360 \div 5 = 72°$.
Explain his mistake and find the correct angle.



Answer