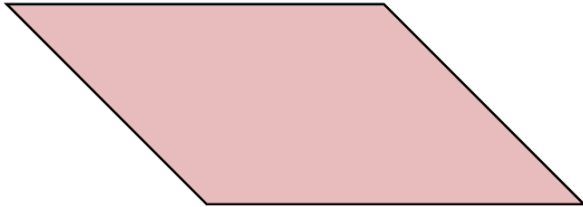




## Apply the exterior angle-sum relationship for polygons

**1**

How many sides does this shape have?



A 4 Sides

B 2 Sides

**2**

pentagon

A

6

B

7

C

2

D

5

E

3

**3**

3 sides

A

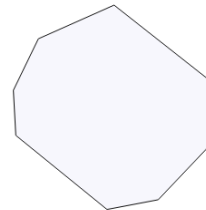
tungsten

B

triangle

**4**

Name the type of shape



A

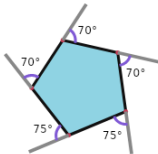
Regular

B

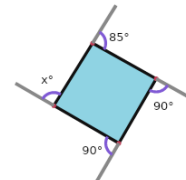
Irregular

**5**

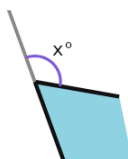
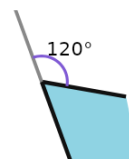
What is the rule for the sum of the exterior angles of a polygon?

A All exterior angles sum to  $540^\circ$ B All exterior angles sum to  $720^\circ$ C All exterior angles sum to  $(5 - 2) \times 180^\circ$ D All exterior angles sum to  $180^\circ$ E All exterior angles sum to  $270^\circ$ F All exterior angles sum to  $360^\circ$ **6**

What is the missing exterior angle?

A  $115^\circ$ B  $35^\circ$ C  $155^\circ$ D  $75^\circ$ E  $135^\circ$ F  $95^\circ$ **7**

This is a regular triangle. What is the exterior angle?

A  $45^\circ$ B  $60^\circ$ C  $72^\circ$ D  $90^\circ$ E  $120^\circ$ **8**This is the  $120^\circ$  exterior angle of a regular polygon. What type of polygon is it?

A Pentagon

B Triangle

C Hexagon

D Quadrilateral

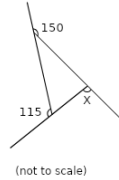
E Octagon



## Apply the exterior angle-sum relationship for polygons

9

What is angle X?



A 75

B 95

C 100

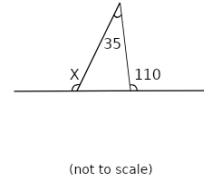
D 105

E 120

F 70

10

What is angle X?



A 120

B 130

C 90

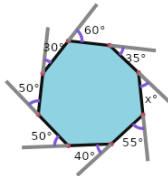
D 125

E 110

F 105

11

What is the missing exterior angle?



A  $100^\circ$

B  $40^\circ$

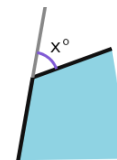
C  $20^\circ$

D  $80^\circ$

E  $60^\circ$

12

This is a regular hexagon. What is the exterior angle?



A  $90^\circ$

B  $60^\circ$

C  $120^\circ$

D  $72^\circ$

E  $45^\circ$