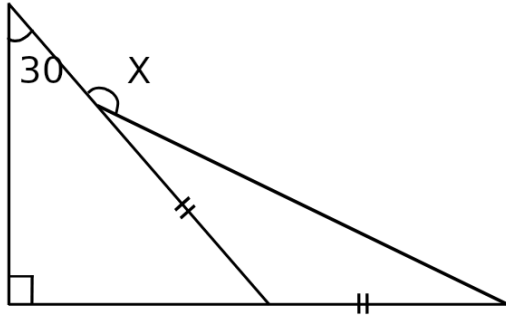




Geometry Problem Solving with 2D Polygons Intro

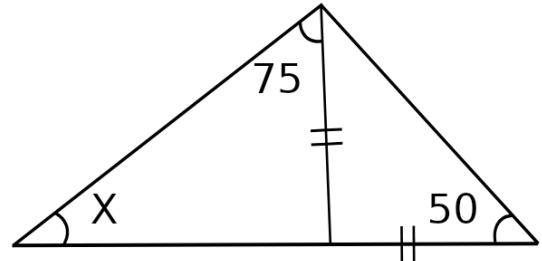
1 What is angle X?



(not to scale)

- | | | |
|----------|----------|----------|
| A
165 | B
155 | C
150 |
| D
140 | E
125 | |

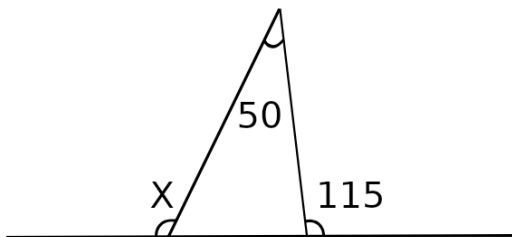
2 What is angle X?



(not to scale)

- | | | |
|---------|---------|---------|
| A
25 | B
10 | C
30 |
| D
5 | E
15 | |

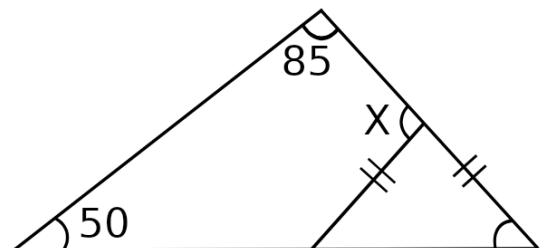
3 What is angle X?



(not to scale)

- | | | |
|----------|----------|----------|
| A
115 | B
90 | C
130 |
| D
140 | E
100 | F
95 |

4 What is angle X?



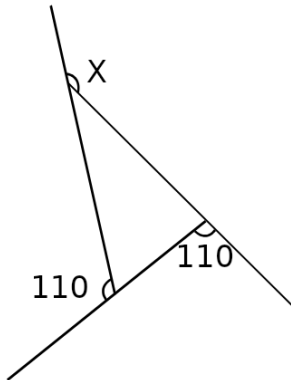
(not to scale)

- | | | |
|---------|----------|---------|
| A
90 | B
100 | C
65 |
| D
85 | E
115 | |



Geometry Problem Solving with 2D Polygons Intro

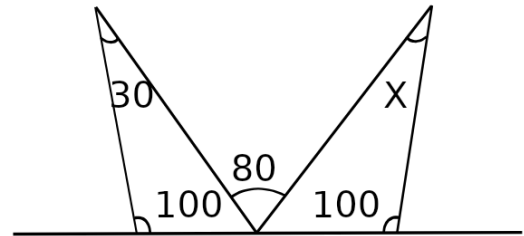
5 What is angle X?



(not to scale)

A 130	B 120	C 160
D 150	E 140	

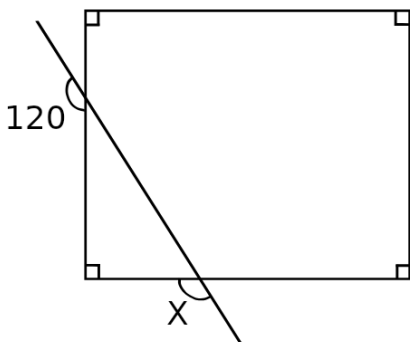
6 What is angle X?



(not to scale)

A 15	B 30	C 40
D 45	E 20	

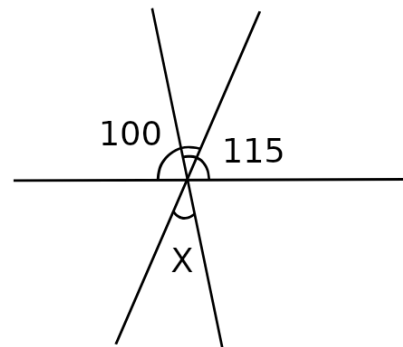
7 What is angle X?



(not to scale)

A 140	B 145	C 155
D 160	E 150	

8 What is angle X?



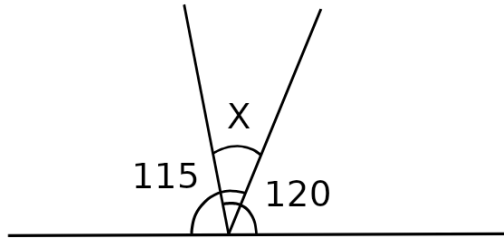
(not to scale)

A 35	B 10	C 15
D 30	E 60	



Geometry Problem Solving with 2D Polygons Intro

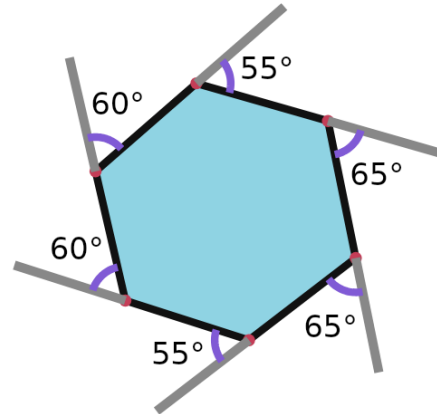
9 What is angle X?



(not to scale)

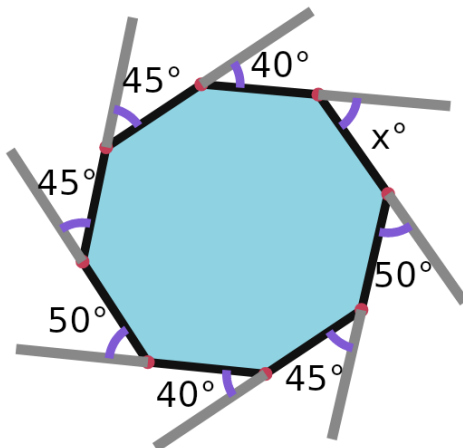
A 55	B 60	C 40
D 80	E 50	F 30

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



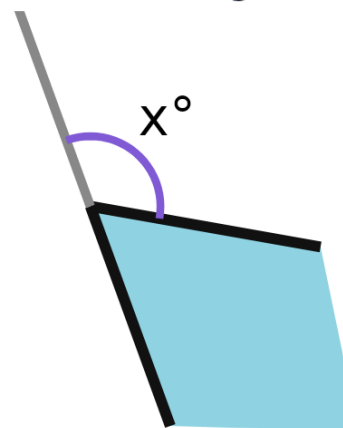
A All exterior angles sum to $(6 - 2) \times 180^\circ$	B All exterior angles sum to 720°	C All exterior angles sum to 540°
D All exterior angles sum to 180°	E All exterior angles sum to 270°	F All exterior angles sum to 360°

11 What is the missing exterior angle?



A 105°	B 45°	C 25°
D 65°	E 5°	F 85°

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

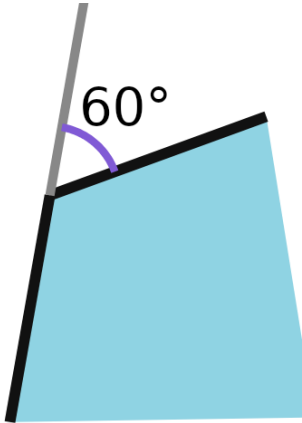


A 45°	B 72°	C 60°
D 120°	E 90°	



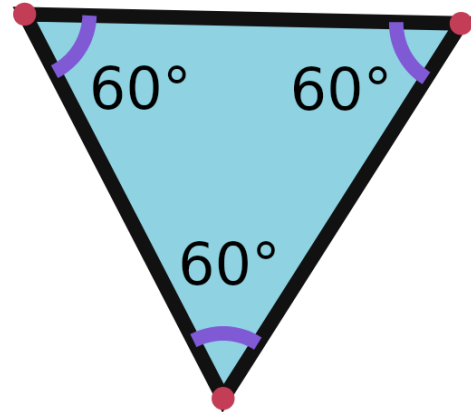
Geometry Problem Solving with 2D Polygons Intro

- 13** This is the 60° exterior angle of a regular polygon. What type of polygon is it?



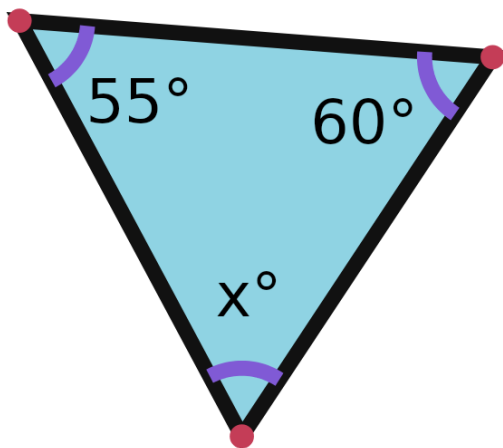
- | | | |
|--------------------|---------------|--------------|
| A
Quadrilateral | B
Octagon | C
Hexagon |
| D
Triangle | E
Pentagon | |

- 14** What is the rule for the sum of the interior angles of a polygon?



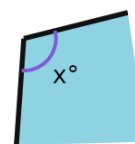
- | | | |
|---|--|--|
| A All angles sum to 540° | B All angles sum to $(3 - 3) \times 180^\circ$ | C All angles sum to 720° |
| D All interior angles sum to $(3 - 2) \times 180^\circ$ | E All angles sum to 270° | F All angles sum to $(3 - 2) \times 360^\circ$ |

- 15** What is the missing interior angle?



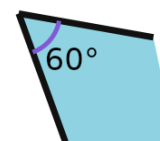
- | | | |
|-----------------|------------------|-----------------|
| A
45° | B
125° | C
25° |
| D
65° | E
105° | F
85° |

- 16** This is a regular pentagon. What is the interior angle?



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

- 17** This is the 60° interior angle of a regular polygon. What type of polygon is it?

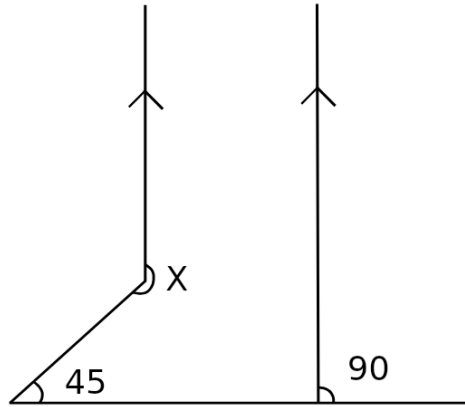


- | | | |
|---------------|--------------------|--------------|
| A
Octagon | B
Quadrilateral | C
Hexagon |
| D
Triangle | E
Pentagon | |



Geometry Problem Solving with 2D Polygons Intro

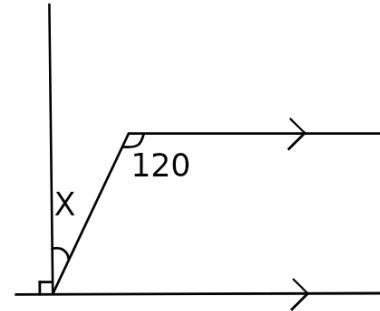
18 What is angle X?



(not to scale)

- | | | |
|----------|----------|----------|
| A
225 | B
205 | C
230 |
| D
210 | E
215 | F
240 |

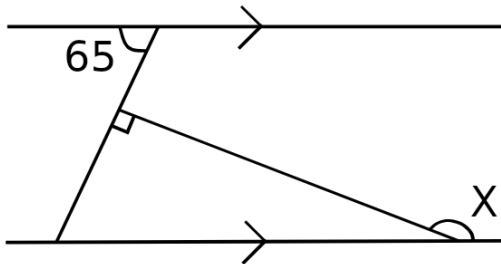
19 What is angle X?



(not to scale)

- | | | |
|---------|---------|---------|
| A
30 | B
20 | C
45 |
| D
25 | E
10 | F
40 |

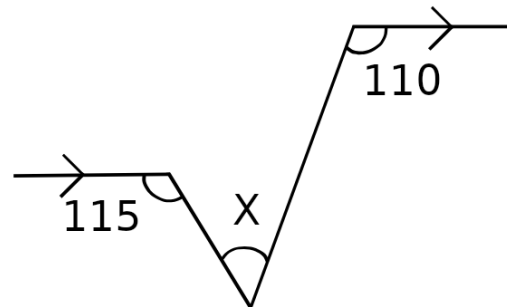
20 What is angle X?



(not to scale)

- | | | |
|----------|----------|----------|
| A
180 | B
140 | C
130 |
| D
155 | E
145 | F
135 |

21 What is angle X?



(not to scale)

- | | | |
|---------|---------|---------|
| A
45 | B
20 | C
25 |
| D
60 | E
35 | F
50 |