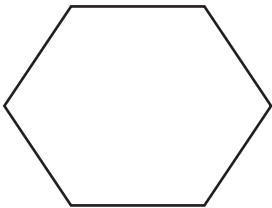


Exterior Angle

Example:

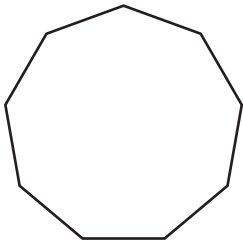


Sum of Exterior angles = 360°

Exterior angle = $\frac{\text{Sum of the exterior angles}}{\text{Number of sides}}$
 $= \frac{360^\circ}{6}$
 $= 60^\circ$

Find the exterior angle for each regular polygon. Round the answer to nearest whole number.

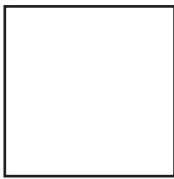
1)



Number of sides =

Each exterior angle =

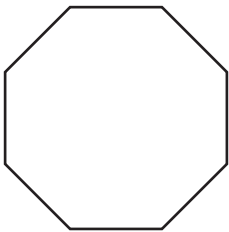
2)



Number of sides =

Each exterior angle =

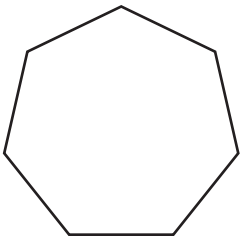
3)



Number of sides =

Each exterior angle =

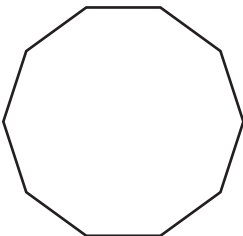
4)



Number of sides =

Each exterior angle =

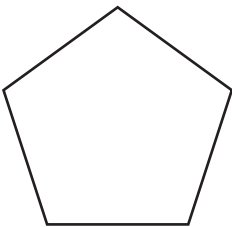
5)



Number of sides =

Each exterior angle =

6)



Number of sides =

Each exterior angle =

7)

regular 18-gon

Number of sides =

Each exterior angle =

8)

regular 20-gon

Number of sides =

Each exterior angle =

9)

regular 15-gon

Number of sides =

Each exterior angle =

10)

regular 14-gon

Number of sides =

Each exterior angle =

11)

regular 12-gon

Number of sides =

Each exterior angle =

12)

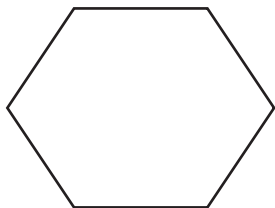
regular 19-gon

Number of sides =

Each exterior angle =

Answer Key

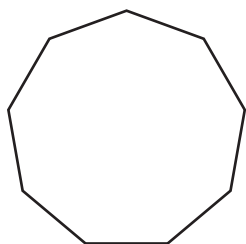
Example:

**Sum of Exterior angles = 360°**

$$\begin{aligned}\text{Exterior angle} &= \frac{\text{Sum of the exterior angles}}{\text{Number of sides}} \\ &= \frac{360^\circ}{6} \\ &= 60^\circ\end{aligned}$$

Find the exterior angle for each regular polygon. Round the answer to nearest whole number.

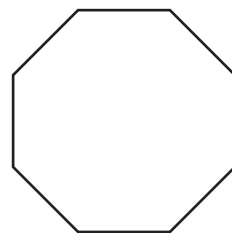
1)

Number of sides = **9**Each exterior angle = **40°**

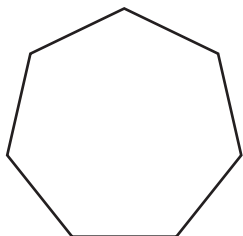
2)

Number of sides = **4**Each exterior angle = **90°**

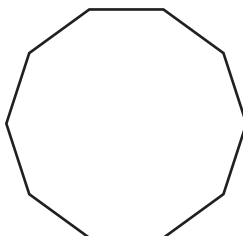
3)

Number of sides = **8**Each exterior angle = **45°**

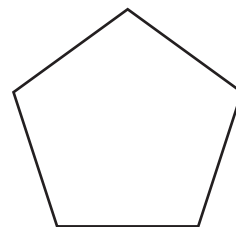
4)

Number of sides = **7**Each exterior angle = **51°**

5)

Number of sides = **10**Each exterior angle = **36°**

6)

Number of sides = **5**Each exterior angle = **72°**

7)

regular 18-gon

Number of sides = **18**Each exterior angle = **20°**

8)

regular 20-gon

Number of sides = **20**Each exterior angle = **18°**

9)

regular 15-gon

Number of sides = **15**Each exterior angle = **24°**

10)

regular 14-gon

Number of sides = **14**Each exterior angle = **26°**

11)

regular 12-gon

Number of sides = **12**Each exterior angle = **30°**

12)

regular 19-gon

Number of sides = **19**Each exterior angle = **19°**