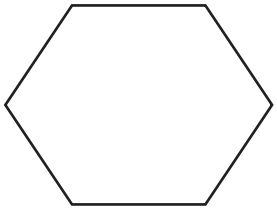
Name : _____ Score : _____

Exterior Angle

Example:



Sum of Exterior angles = 360^o

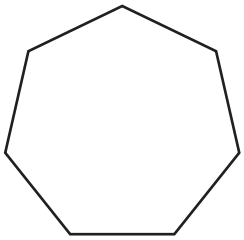
$$\text{Exterior angle} = \frac{\text{Sum of the exterior angles}}{\text{Number of sides}}$$

$$= \frac{360^o}{6}$$

$$= \mathbf{60^o}$$

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

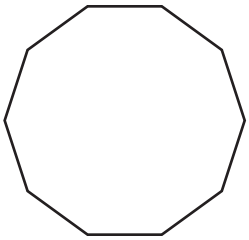
1)



Number of sides =

Each exterior angle =

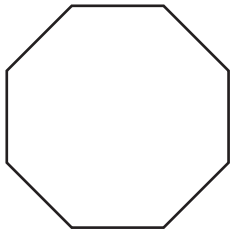
2)



Number of sides =

Each exterior angle =

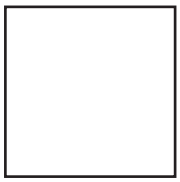
3)



Number of sides =

Each exterior angle =

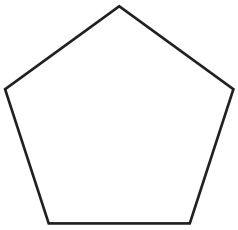
4)



Number of sides =

Each exterior angle =

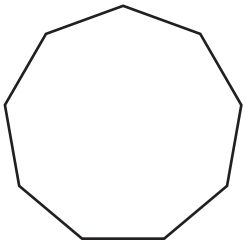
5)



Number of sides =

Each exterior angle =

6)



Number of sides =

Each exterior angle =

7) regular 13-gon

Number of sides =

Each exterior angle =

8) regular 15-gon

Number of sides =

Each exterior angle =

9) regular 12-gon

Number of sides =

Each exterior angle =

10) regular 20-gon

Number of sides =

Each exterior angle =

11) regular 18-gon

Number of sides =

Each exterior angle =

12) regular 14-gon

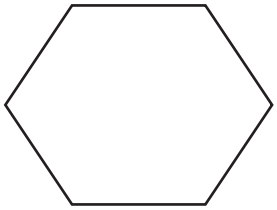
Number of sides =

Each exterior angle =

Name : _____ Score : _____

Answer Key

Example:



Sum of Exterior angles = 360^o

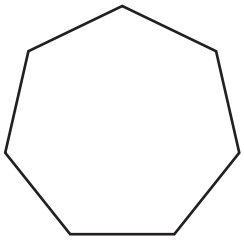
Exterior angle $= \frac{\text{Sum of the exterior angles}}{\text{Number of sides}}$

$= \frac{360^o}{6}$

$= \mathbf{60^o}$

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

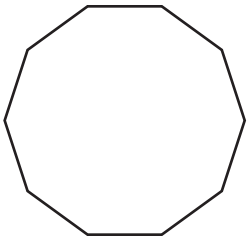
1)



Number of sides = **7**

Each exterior angle = **51^o**

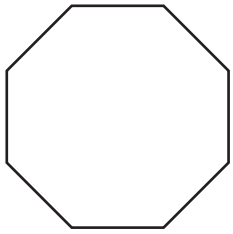
2)



Number of sides = **10**

Each exterior angle = **36^o**

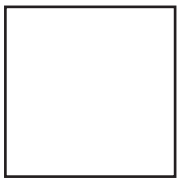
3)



Number of sides = **8**

Each exterior angle = **45^o**

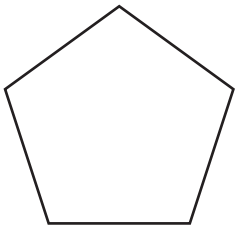
4)



Number of sides = **4**

Each exterior angle = **90^o**

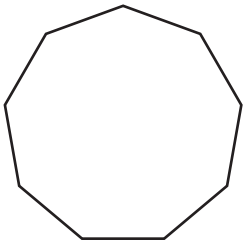
5)



Number of sides = **5**

Each exterior angle = **72^o**

6)



Number of sides = **9**

Each exterior angle = **40^o**

7) regular 13-gon

Number of sides = **13**

Each exterior angle = **28^o**

8) regular 15-gon

Number of sides = **15**

Each exterior angle = **24^o**

9) regular 12-gon

Number of sides = **12**

Each exterior angle = **30^o**

10) regular 20-gon

Number of sides = **20**

Each exterior angle = **18^o**

11) regular 18-gon

Number of sides = **18**

Each exterior angle = **20^o**

12) regular 14-gon

Number of sides = **14**

Each exterior angle = **26^o**