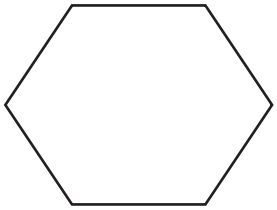
Name : _____ Score : _____

Exterior Angle

Example:



Sum of Exterior angles = 360^o

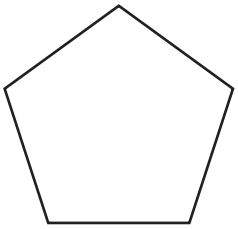
Exterior angle = $\frac{\text{Sum of the exterior angles}}{\text{Number of sides}}$

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

$= \mathbf{60^o}$

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

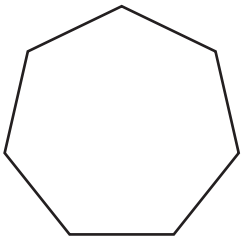
1)



Number of sides = _____

Each exterior angle = _____

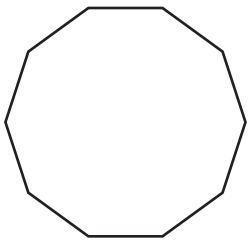
2)



Number of sides = _____

Each exterior angle = _____

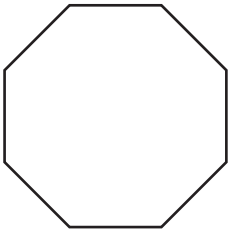
3)



Number of sides = _____

Each exterior angle = _____

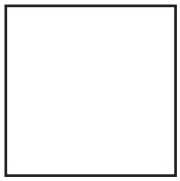
4)



Number of sides = _____

Each exterior angle = _____

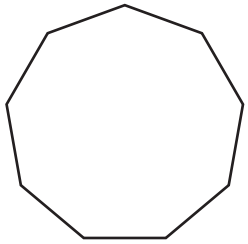
5)



Number of sides = _____

Each exterior angle = _____

6)



Number of sides = _____

Each exterior angles = _____

7) regular 12-gon

Number of sides = _____

Each exterior angle = _____

8) regular 15-gon

Number of sides = _____

Each exterior angle = _____

9) regular 11-gon

Number of sides = _____

Each exterior angle = _____

10) regular 19-gon

Number of sides = _____

Each exterior angle = _____

11) regular 17-gon

Number of sides = _____

Each exterior angle = _____

12) regular 13-gon

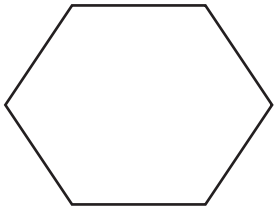
Number of sides = _____

Each exterior angle = _____

Name : _____ Score : _____

Answer key

Example:



Sum of Exterior angles = 360°

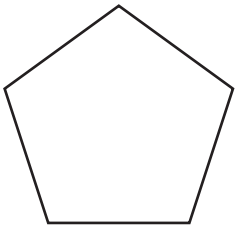
$$\text{Exterior angle} = \frac{\text{Sum of the exterior angles}}{\text{Number of sides}}$$

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

$$= 60^{o}$$

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

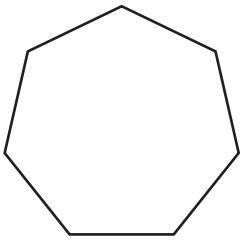
1)



Number of sides = 5

Each exterior angle = 72^{o}

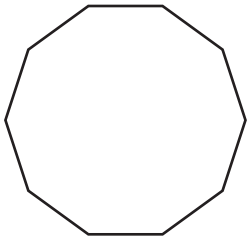
2)



Number of sides = 7

Each exterior angle = 51^{o}

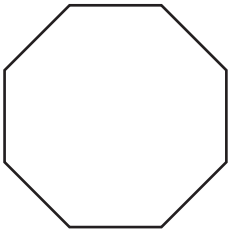
3)



Number of sides = 10

Each exterior angle = 36^{o}

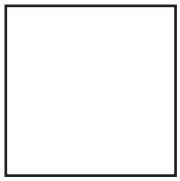
4)



Number of sides = 8

Each exterior angle = 45^{o}

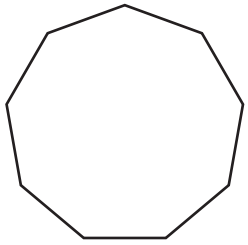
5)



Number of sides = 4

Each exterior angle = 90^{o}

6)



Number of sides = 9

Each exterior angle = 40^{o}

7) regular 12-gon

Number of sides = 12

Each exterior angle = 30^{o}

8) regular 15-gon

Number of sides = 15

Each exterior angle = 24^{o}

9) regular 11-gon

Number of sides = 11

Each exterior angle = 33^{o}

10) regular 19-gon

Number of sides = 19

Each exterior angle = 19^{o}

11) regular 17-gon

Number of sides = 17

Each exterior angle = 21^{o}

12) regular 13-gon

Number of sides = 13

Each exterior angle = 28^{o}