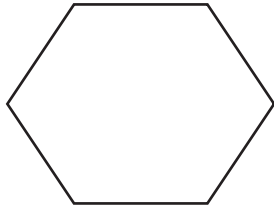


Sum of Interior Angles

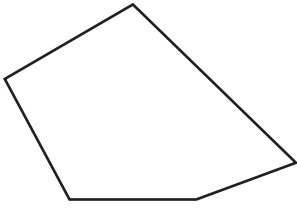
Example:



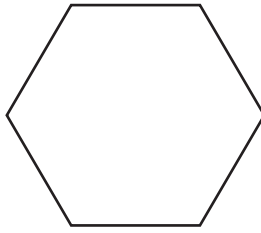
$$\begin{aligned} \text{Sum of the interior angles} &= (\text{Number of sides} - 2) \times 180^\circ \\ &= (6 - 2) \times 180^\circ \\ &= 4 \times 180^\circ = \mathbf{720^\circ} \end{aligned}$$

Find the sum of interior angles for each polygon.

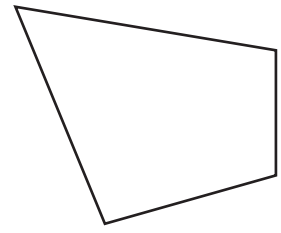
1)

Number of sides = Sum of the interior angles =

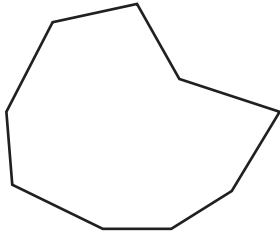
2)

Number of sides = Sum of the interior angles =

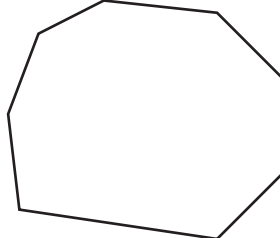
3)

Number of sides = Sum of the interior angles =

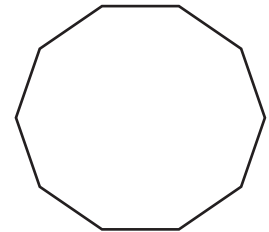
4)

Number of sides = Sum of the interior angles =

5)

Number of sides = Sum of the interior angles =

6)

Number of sides = Sum of the interior angles =

7)

regular 13-gon

Number of sides = Sum of the interior angles =

8)

regular 17-gon

Number of sides = Sum of the interior angles =

9)

regular 12-gon

Number of sides = Sum of the interior angles =

10)

regular 18-gon

Number of sides = Sum of the interior angles =

11)

regular 19-gon

Number of sides = Sum of the interior angles =

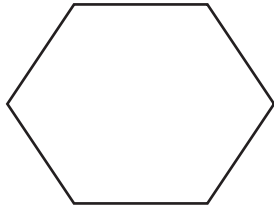
12)

regular 14-gon

Number of sides = Sum of the interior angles =

Answer key

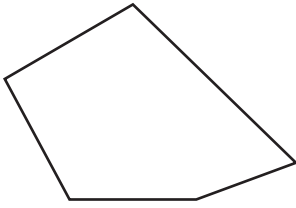
Example:



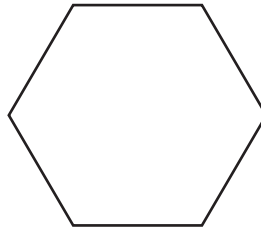
$$\begin{aligned} \text{Sum of the interior angles} &= (\text{Number of sides} - 2) \times 180^\circ \\ &= (6 - 2) \times 180^\circ \\ &= 4 \times 180^\circ = \mathbf{720^\circ} \end{aligned}$$

Find the sum of interior angles for each polygon.

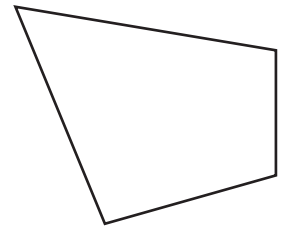
1)

Number of sides = **5**Sum of the interior angles = **540°**

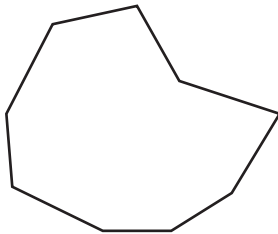
2)

Number of sides = **6**Sum of the interior angles = **720°**

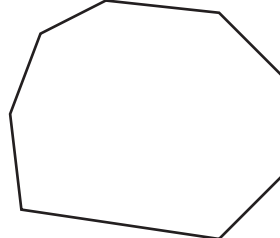
3)

Number of sides = **4**Sum of the interior angles = **360°**

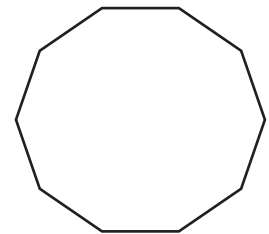
4)

Number of sides = **9**Sum of the interior angles = **1260°**

5)

Number of sides = **8**Sum of the interior angles = **1080°**

6)

Number of sides = **10**Sum of the interior angles = **1440°**

7)

regular 13-gon

Number of sides = **13**Sum of the interior angles = **1980°**

8)

regular 17-gon

Number of sides = **17**Sum of the interior angles = **2700°**

9)

regular 12-gon

Number of sides = **12**Sum of the interior angles = **1800°**

10)

regular 18-gon

Number of sides = **18**Sum of the interior angles = **2880°**

11)

regular 19-gon

Number of sides = **19**Sum of the interior angles = **3060°**

12)

regular 14-gon

Number of sides = **14**Sum of the interior angles = **2160°**