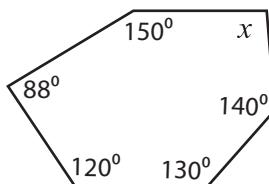


Name : _____

Score : _____

Interior Angle

Example:

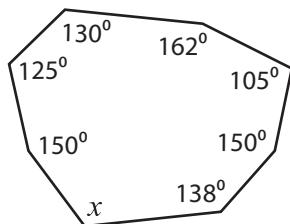


$$\begin{aligned}\text{Sum of the interior angles} &= (\text{Number of sides} - 2) \times 180^\circ \\ &= (6 - 2) \times 180^\circ \\ &= 4 \times 180 = 720^\circ\end{aligned}$$

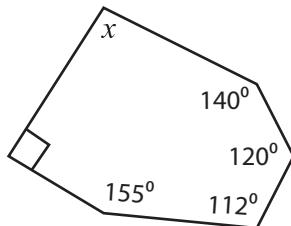
$$\begin{aligned}\text{Sum of the interior angles} &= 120^\circ + 140^\circ + 130^\circ + 150^\circ + 88^\circ + x \\ 720^\circ &= 628^\circ + x \\ x &= 720^\circ - 628^\circ = 92^\circ\end{aligned}$$

Find the interior angle for each irregular polygon.

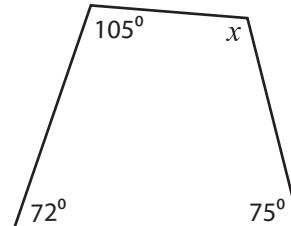
1)



2)



3)

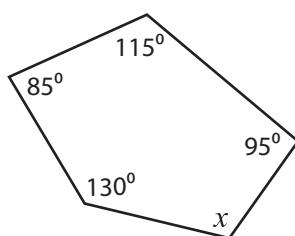


$$\begin{aligned}\text{Sum of the interior angles} &= \dots \\ x &= \dots\end{aligned}$$

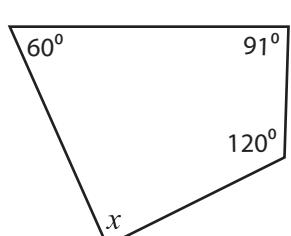
$$\begin{aligned}\text{Sum of the interior angles} &= \dots \\ x &= \dots\end{aligned}$$

$$\begin{aligned}\text{Sum of the interior angles} &= \dots \\ x &= \dots\end{aligned}$$

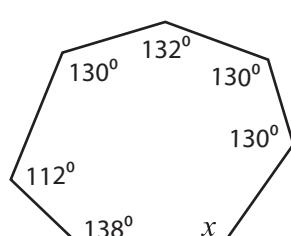
4)



5)



6)

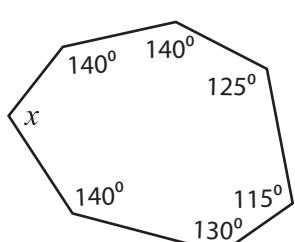


$$\begin{aligned}\text{Sum of the interior angles} &= \dots \\ x &= \dots\end{aligned}$$

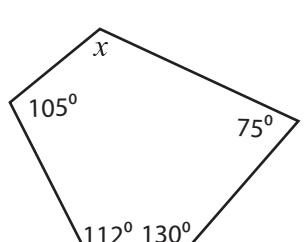
$$\begin{aligned}\text{Sum of the interior angles} &= \dots \\ x &= \dots\end{aligned}$$

$$\begin{aligned}\text{Sum of the interior angles} &= \dots \\ x &= \dots\end{aligned}$$

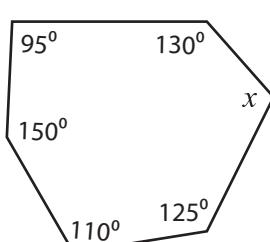
7)



8)



9)



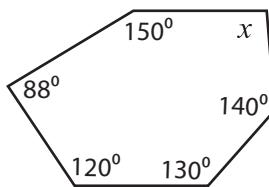
$$\begin{aligned}\text{Sum of the interior angles} &= \dots \\ x &= \dots\end{aligned}$$

$$\begin{aligned}\text{Sum of the interior angles} &= \dots \\ x &= \dots\end{aligned}$$

$$\begin{aligned}\text{Sum of the interior angles} &= \dots \\ x &= \dots\end{aligned}$$

Answer Key

Example:

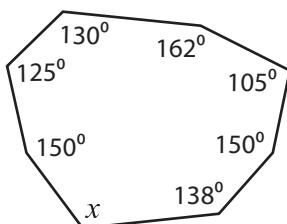


$$\begin{aligned}\text{Sum of the interior angles} &= (\text{Number of sides} - 2) \times 180^\circ \\ &= (5 - 2) \times 180^\circ \\ &= 3 \times 180^\circ = 540^\circ\end{aligned}$$

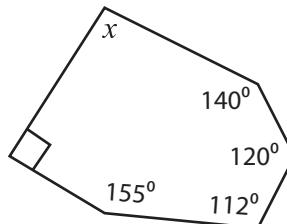
$$\begin{aligned}\text{Sum of the interior angles} &= 120^\circ + 140^\circ + 130^\circ + 150^\circ + 88^\circ + x \\ 540^\circ &= 628^\circ + x \\ x &= 540^\circ - 628^\circ = 112^\circ\end{aligned}$$

Find the interior angle for each irregular polygon.

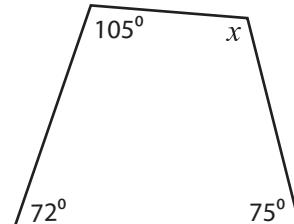
1)



2)



3)



Sum of the interior angles = 1080°

$x = 120^\circ$

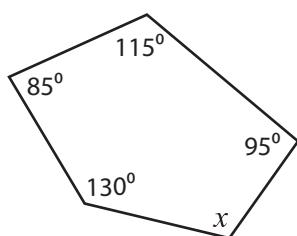
Sum of the interior angles = 720°

$x = 103^\circ$

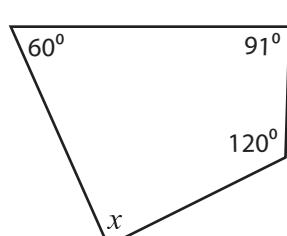
Sum of the interior angles = 360°

$x = 108^\circ$

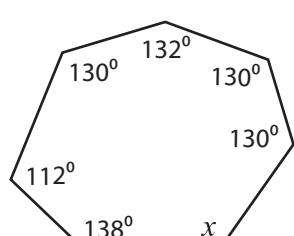
4)



5)



6)



Sum of the interior angles = 540°

$x = 115^\circ$

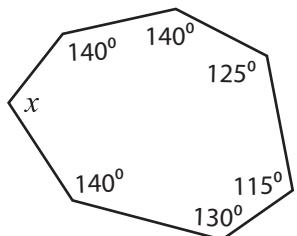
Sum of the interior angles = 360°

$x = 89^\circ$

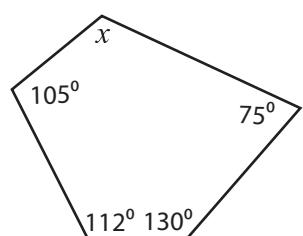
Sum of the interior angles = 900°

$x = 128^\circ$

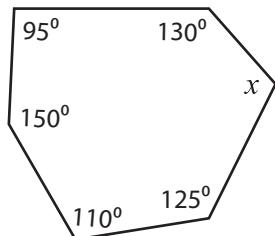
7)



8)



9)



Sum of the interior angles = 900°

$x = 110^\circ$

Sum of the interior angles = 540°

$x = 118^\circ$

Sum of the interior angles = 720°

$x = 110^\circ$