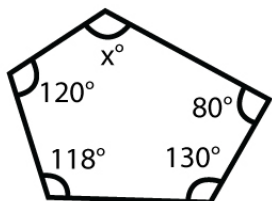


Name : _____

Score : _____ Date : _____

Interior Angles in a Polygon Worksheet

Solved Example:

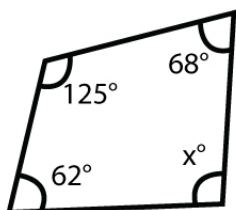


$$\begin{aligned} \text{Sum of the interior angles} &= (\text{Number of sides} - 2) \times 180^\circ \\ &= (5-2) \times 180^\circ \\ &= 3 \times 180^\circ = 540^\circ \end{aligned}$$

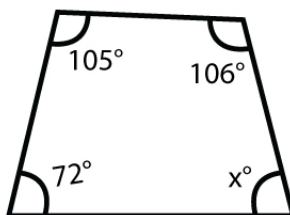
$$\begin{aligned} \text{Sum of the interior angles} &= 120^\circ + 118^\circ + 130^\circ + 80^\circ + x^\circ \\ 540^\circ &= 448^\circ + x^\circ \\ x^\circ &= 92^\circ \end{aligned}$$

Find the missing interior angle(s) for each polygon.

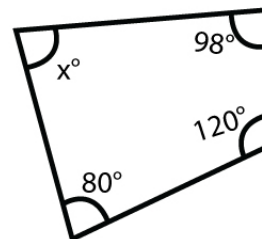
1



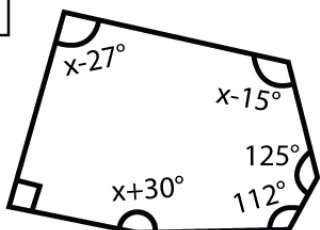
2



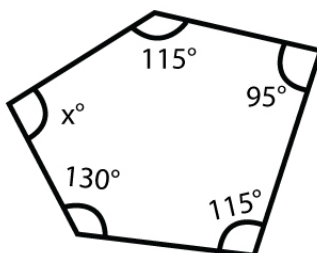
3



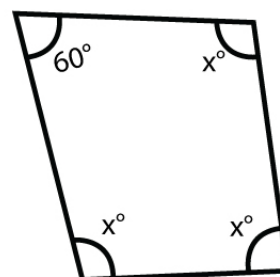
4



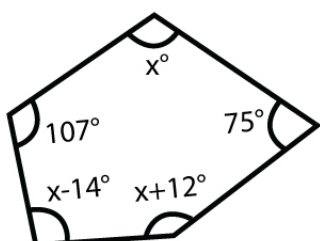
5



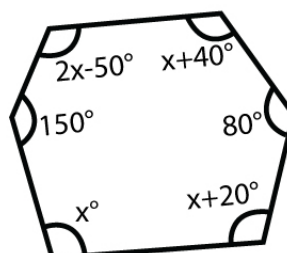
6



7



8

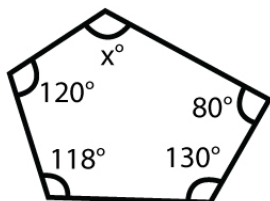


Name : _____

Score : _____ Date : _____

Interior Angles in a Polygon Worksheet

Solved Example:

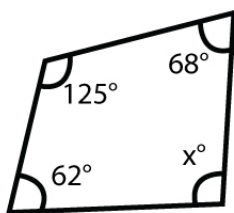


$$\begin{aligned} \text{Sum of the interior angles} &= (\text{Number of sides} - 2) \times 180^\circ \\ &= (5-2) \times 180^\circ \\ &= 3 \times 180^\circ = 540^\circ \end{aligned}$$

$$\begin{aligned} \text{Sum of the interior angles} &= 120^\circ + 118^\circ + 130^\circ + 80^\circ + x^\circ \\ 540^\circ &= 448^\circ + x^\circ \\ x^\circ &= 92^\circ \end{aligned}$$

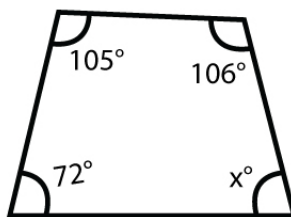
Answers

1



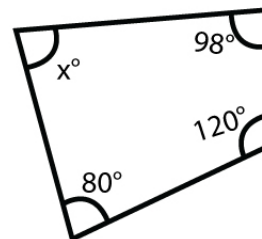
105°

2



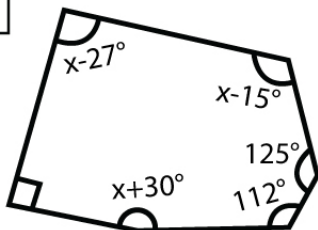
77°

3



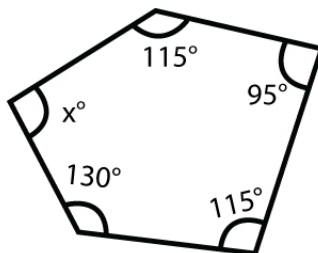
62°

4



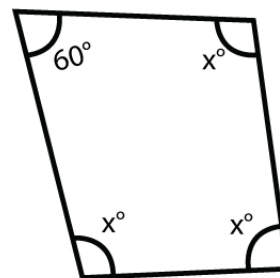
108°, 165°, 120°

5



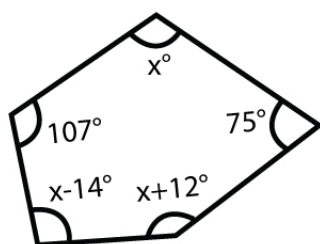
85°

6



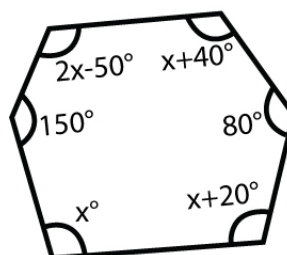
100°

7



120°, 114°, 132°

8



96°, 116°, 136°, 142°