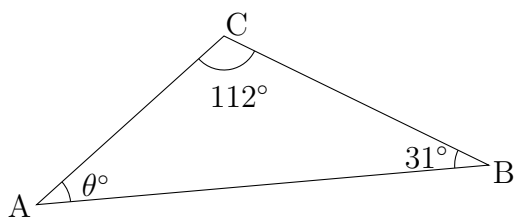


Name: _____

Date: _____

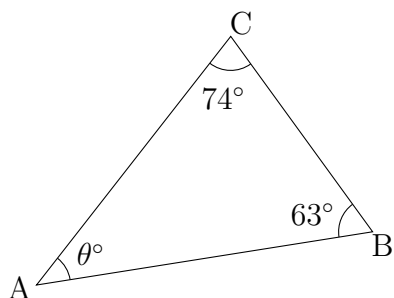
Angles in a Triangle: Answers

(1)



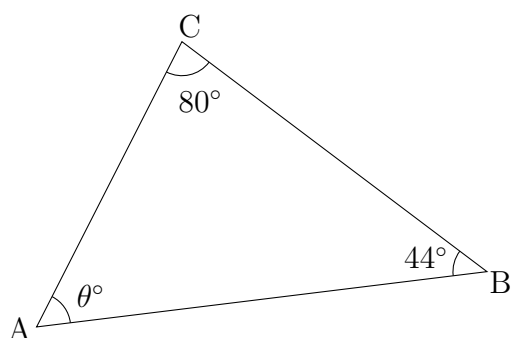
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (31^\circ + 112^\circ) \\ &= 180^\circ - 143^\circ \\ &= 37^\circ\end{aligned}$$

(2)



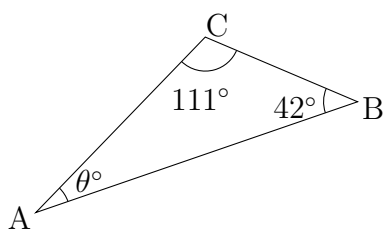
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (63^\circ + 74^\circ) \\ &= 180^\circ - 137^\circ \\ &= 43^\circ\end{aligned}$$

(3)



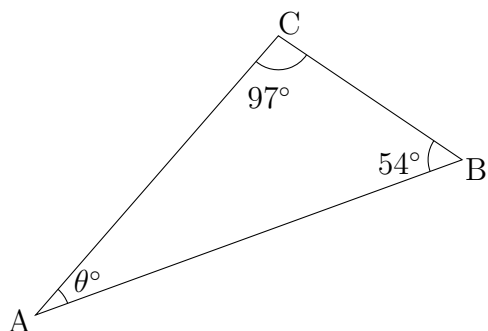
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (44^\circ + 80^\circ) \\ &= 180^\circ - 124^\circ \\ &= 56^\circ\end{aligned}$$

(4)



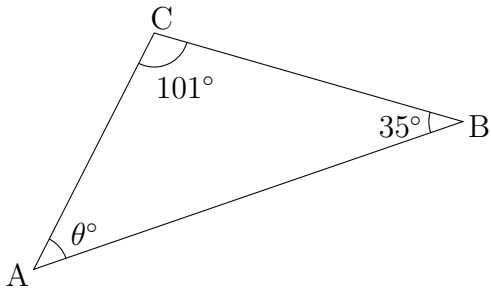
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (42^\circ + 111^\circ) \\ &= 180^\circ - 153^\circ \\ &= 27^\circ\end{aligned}$$

(5)



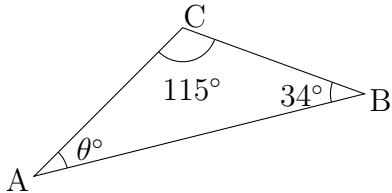
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (54^\circ + 97^\circ) \\ &= 180^\circ - 151^\circ \\ &= 29^\circ\end{aligned}$$

(6)



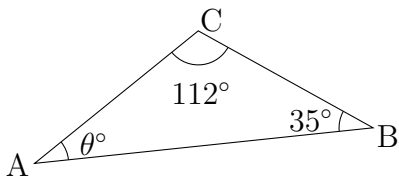
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (35^\circ + 101^\circ) \\ &= 180^\circ - 136^\circ \\ &= 44^\circ\end{aligned}$$

(7)



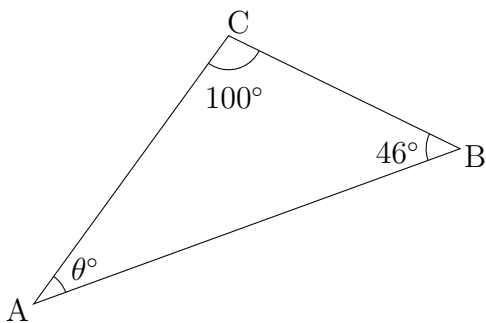
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (34^\circ + 115^\circ) \\ &= 180^\circ - 149^\circ \\ &= 31^\circ\end{aligned}$$

(8)



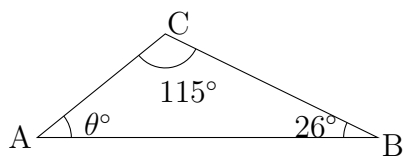
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (35^\circ + 112^\circ) \\ &= 180^\circ - 147^\circ \\ &= 33^\circ\end{aligned}$$

(9)



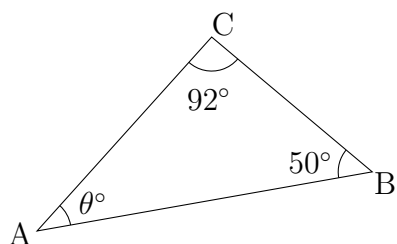
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (46^\circ + 100^\circ) \\ &= 180^\circ - 146^\circ \\ &= 34^\circ\end{aligned}$$

(10)



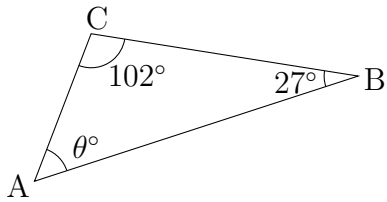
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (26^\circ + 115^\circ) \\ &= 180^\circ - 141^\circ \\ &= 39^\circ\end{aligned}$$

(11)



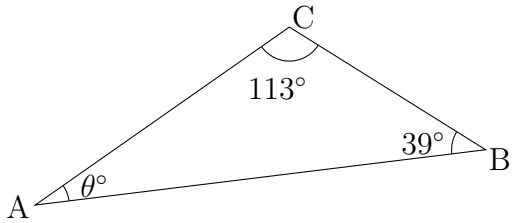
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (50^\circ + 92^\circ) \\ &= 180^\circ - 142^\circ \\ &= 38^\circ\end{aligned}$$

(12)



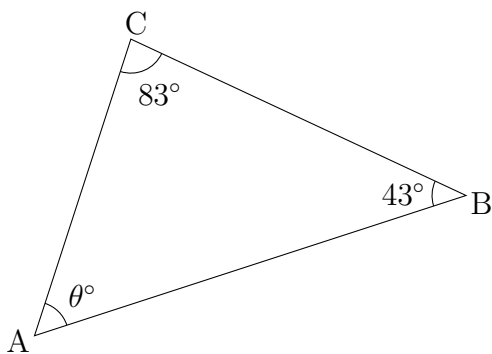
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (27^\circ + 102^\circ) \\ &= 180^\circ - 129^\circ \\ &= 51^\circ\end{aligned}$$

(13)



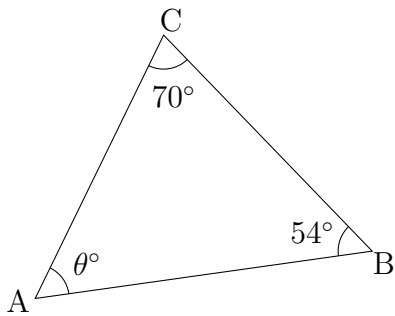
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (39^\circ + 113^\circ) \\ &= 180^\circ - 152^\circ \\ &= 28^\circ\end{aligned}$$

(14)



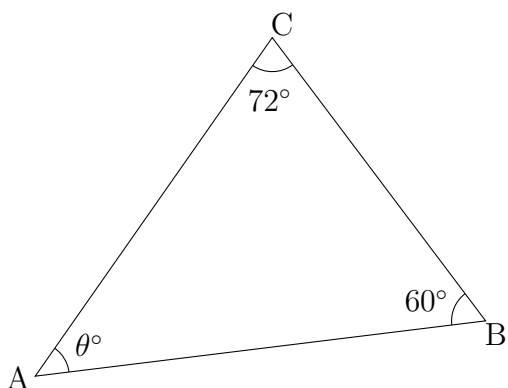
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (43^\circ + 83^\circ) \\ &= 180^\circ - 126^\circ \\ &= 54^\circ\end{aligned}$$

(15)



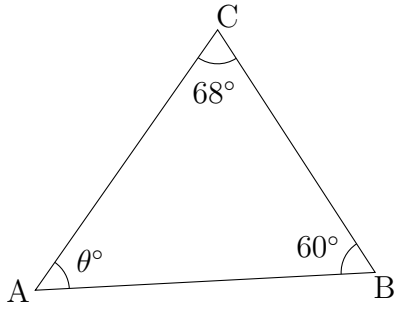
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (54^\circ + 70^\circ) \\ &= 180^\circ - 124^\circ \\ &= 56^\circ\end{aligned}$$

(16)



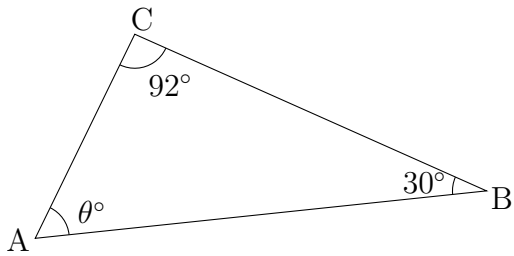
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (60^\circ + 72^\circ) \\ &= 180^\circ - 132^\circ \\ &= 48^\circ\end{aligned}$$

(17)



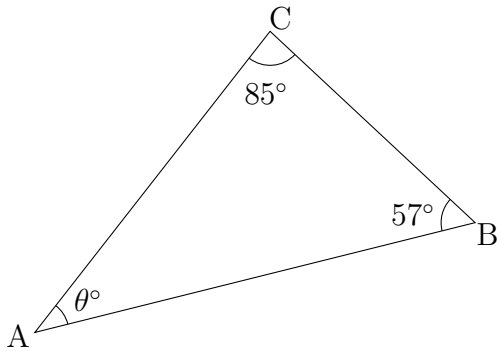
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (60^\circ + 68^\circ) \\ &= 180^\circ - 128^\circ \\ &= 52^\circ\end{aligned}$$

(18)



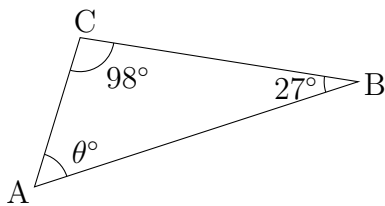
$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (30^\circ + 92^\circ) \\ &= 180^\circ - 122^\circ \\ &= 58^\circ\end{aligned}$$

(19)



$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (57^\circ + 85^\circ) \\ &= 180^\circ - 142^\circ \\ &= 38^\circ\end{aligned}$$

(20)



$$\begin{aligned}\angle A &= 180^\circ - (\angle B + \angle C) \\ &= 180^\circ - (27^\circ + 98^\circ) \\ &= 180^\circ - 125^\circ \\ &= 55^\circ\end{aligned}$$