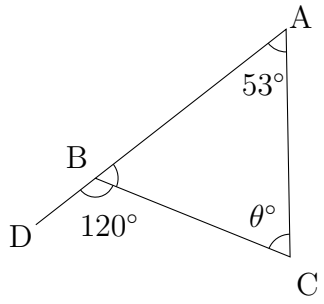
Name: _____ **Date:** _____

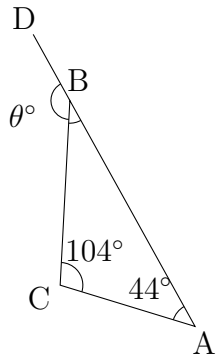
Angles in a Triangle: Answers

(1)



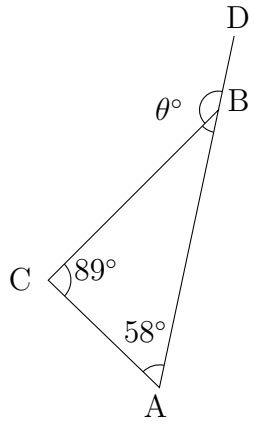
$$\begin{aligned}\angle C &= \angle DBC - \angle A \\ &= 120^\circ - 53^\circ \\ &= 67^\circ\end{aligned}$$

(2)



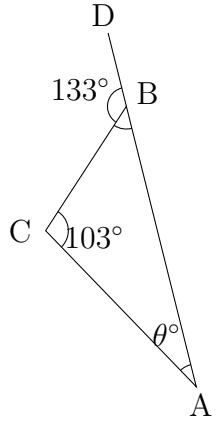
$$\begin{aligned}\angle DBC &= \angle A + \angle C \\ &= 44^\circ + 104^\circ \\ &= 148^\circ\end{aligned}$$

(3)



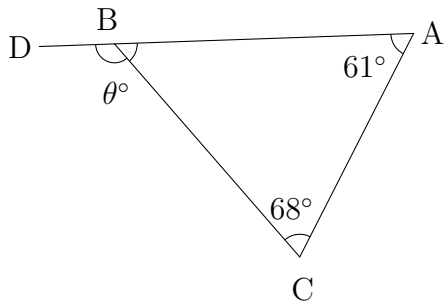
$$\begin{aligned}\angle DBC &= \angle A + \angle C \\ &= 58^\circ + 89^\circ \\ &= 147^\circ\end{aligned}$$

(4)



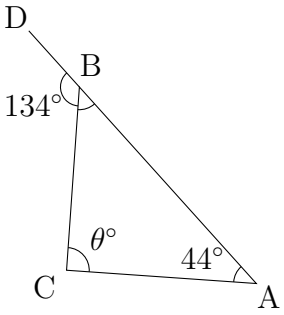
$$\begin{aligned}\angle A &= \angle DBC - \angle C \\ &= 133^\circ - 103^\circ \\ &= 30^\circ\end{aligned}$$

(5)



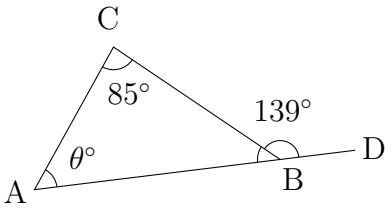
$$\begin{aligned}\angle\text{DBC} &= \angle\text{A} + \angle\text{C} \\ &= 61^\circ + 68^\circ \\ &= 129^\circ\end{aligned}$$

(6)



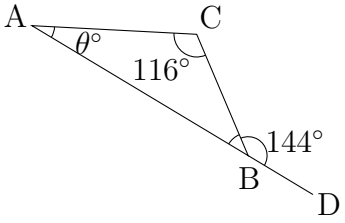
$$\begin{aligned}\angle\text{C} &= \angle\text{DBC} - \angle\text{A} \\ &= 134^\circ - 44^\circ \\ &= 90^\circ\end{aligned}$$

(7)



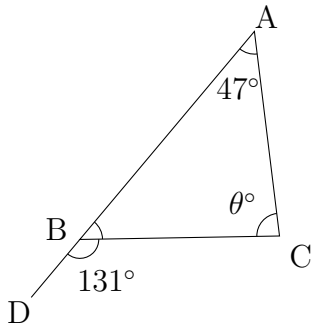
$$\begin{aligned}\angle\text{A} &= \angle\text{DBC} - \angle\text{C} \\ &= 139^\circ - 85^\circ \\ &= 54^\circ\end{aligned}$$

(8)



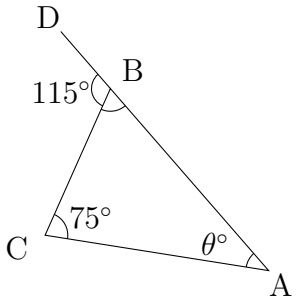
$$\begin{aligned}\angle\text{A} &= \angle\text{DBC} - \angle\text{C} \\ &= 144^\circ - 116^\circ \\ &= 28^\circ\end{aligned}$$

(9)



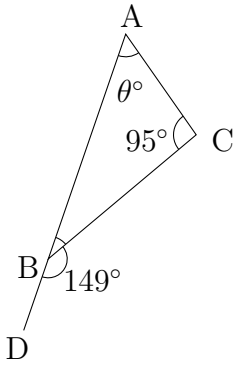
$$\begin{aligned}\angle\mathrm{C} &= \angle\mathrm{DBC} - \angle\mathrm{A} \\ &= 131^\circ - 47^\circ \\ &= 84^\circ\end{aligned}$$

(10)



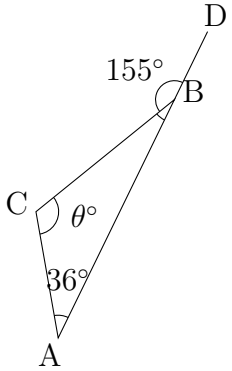
$$\begin{aligned}\angle\mathrm{A} &= \angle\mathrm{DBC} - \angle\mathrm{C} \\ &= 115^\circ - 75^\circ \\ &= 40^\circ\end{aligned}$$

(11)



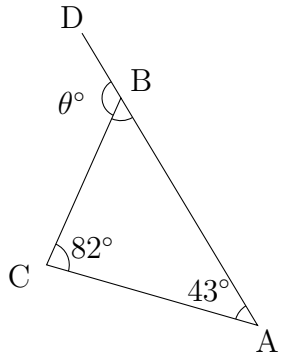
$$\begin{aligned}\angle\mathrm{A} &= \angle\mathrm{DBC} - \angle\mathrm{C} \\ &= 149^\circ - 95^\circ \\ &= 54^\circ\end{aligned}$$

(12)



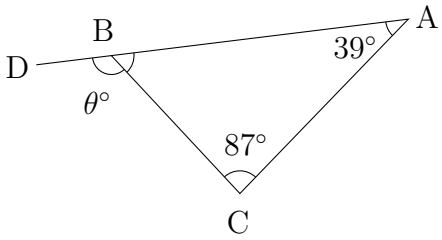
$$\begin{aligned}\angle\mathrm{C} &= \angle\mathrm{DBC} - \angle\mathrm{A} \\ &= 155^\circ - 36^\circ \\ &= 119^\circ\end{aligned}$$

(13)



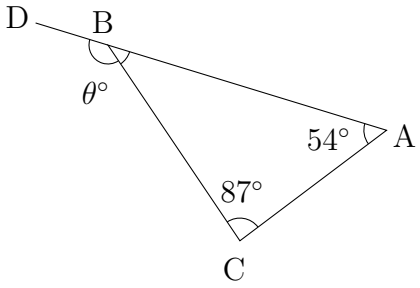
$$\begin{aligned}\angle\text{DBC} &= \angle\text{A} + \angle\text{C} \\ &= 43^\circ + 82^\circ \\ &= 125^\circ\end{aligned}$$

(14)



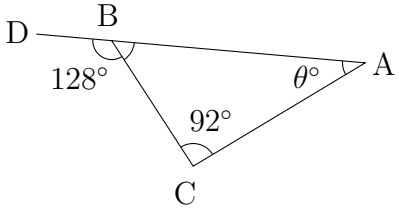
$$\begin{aligned}\angle\text{DBC} &= \angle\text{A} + \angle\text{C} \\ &= 39^\circ + 87^\circ \\ &= 126^\circ\end{aligned}$$

(15)



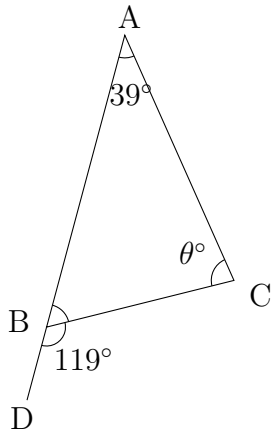
$$\begin{aligned}\angle\text{DBC} &= \angle\text{A} + \angle\text{C} \\ &= 54^\circ + 87^\circ \\ &= 141^\circ\end{aligned}$$

(16)



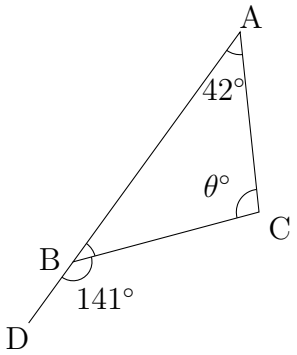
$$\begin{aligned}\angle\text{A} &= \angle\text{DBC} - \angle\text{C} \\ &= 128^\circ - 92^\circ \\ &= 36^\circ\end{aligned}$$

(17)



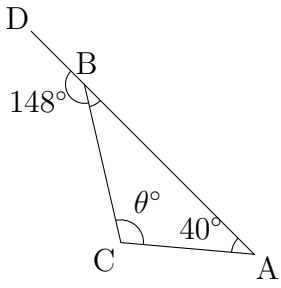
$$\begin{aligned}\angle C &= \angle DBC - \angle A \\ &= 119^\circ - 39^\circ \\ &= 80^\circ\end{aligned}$$

(18)



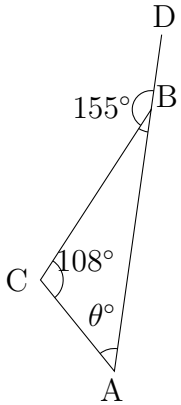
$$\begin{aligned}\angle C &= \angle DBC - \angle A \\ &= 141^\circ - 42^\circ \\ &= 99^\circ\end{aligned}$$

(19)



$$\begin{aligned}\angle C &= \angle DBC - \angle A \\ &= 148^\circ - 40^\circ \\ &= 108^\circ\end{aligned}$$

(20)



$$\begin{aligned}\angle A &= \angle DBC - \angle C \\ &= 155^\circ - 108^\circ \\ &= 47^\circ\end{aligned}$$