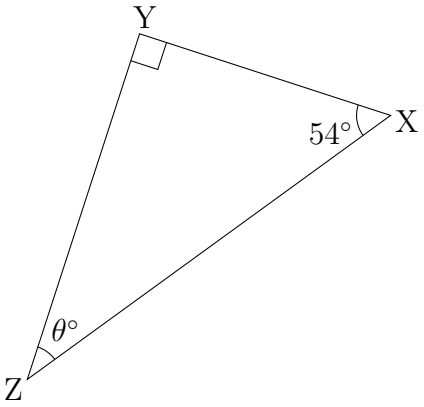
Name: _____ **Date:** _____

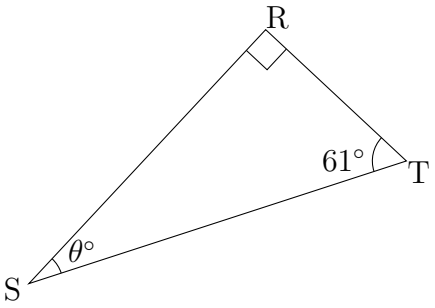
Angles in Right Triangles: Answers

(1)



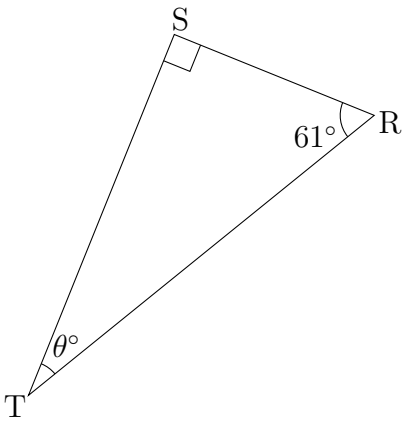
$$\begin{aligned}\angle Z &= 90^\circ - \angle X \\ &= 90^\circ - 54^\circ \\ &= 36^\circ\end{aligned}$$

(2)



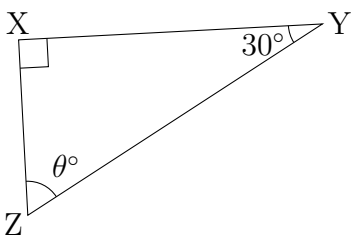
$$\begin{aligned}\angle S &= 90^\circ - \angle T \\ &= 90^\circ - 61^\circ \\ &= 29^\circ\end{aligned}$$

(3)



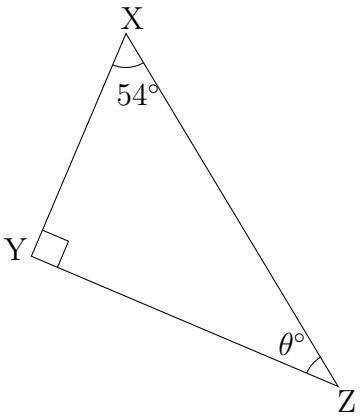
$$\begin{aligned}\angle T &= 90^\circ - \angle R \\ &= 90^\circ - 61^\circ \\ &= 29^\circ\end{aligned}$$

(4)



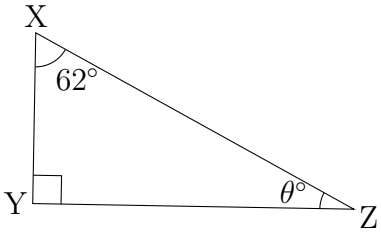
$$\begin{aligned}\angle Z &= 90^\circ - \angle Y \\ &= 90^\circ - 30^\circ \\ &= 60^\circ\end{aligned}$$

(5)



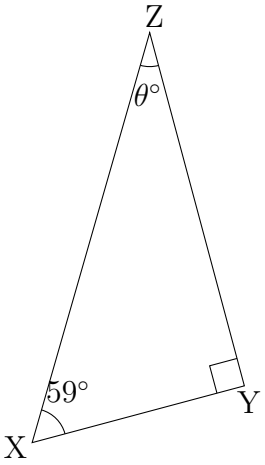
$$\begin{aligned}\angle \mathrm{Z} &= 90^\circ - \angle \mathrm{X} \\ &= 90^\circ - 54^\circ \\ &= 36^\circ\end{aligned}$$

(6)



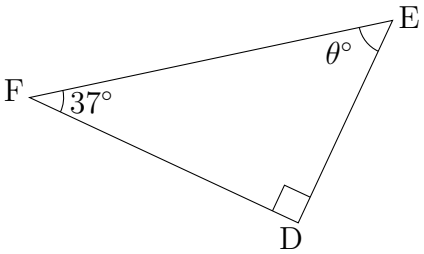
$$\begin{aligned}\angle \mathrm{Z} &= 90^\circ - \angle \mathrm{X} \\ &= 90^\circ - 62^\circ \\ &= 28^\circ\end{aligned}$$

(7)



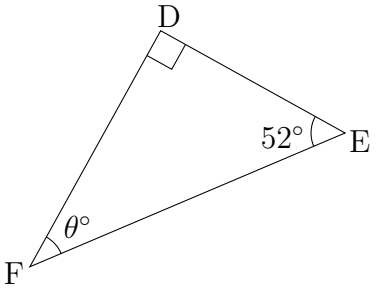
$$\begin{aligned}\angle \mathrm{Z} &= 90^\circ - \angle \mathrm{X} \\ &= 90^\circ - 59^\circ \\ &= 31^\circ\end{aligned}$$

(8)



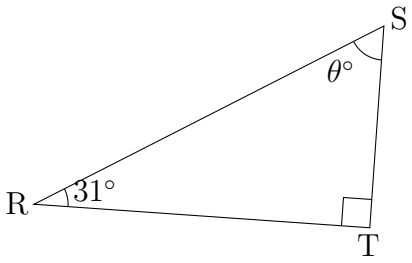
$$\begin{aligned}\angle \mathrm{E} &= 90^\circ - \angle \mathrm{F} \\ &= 90^\circ - 37^\circ \\ &= 53^\circ\end{aligned}$$

(9)



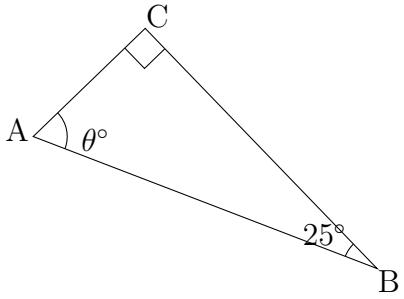
$$\begin{aligned}\angle \mathrm{F} &= 90^\circ - \angle \mathrm{E} \\ &= 90^\circ - 52^\circ \\ &= 38^\circ\end{aligned}$$

(10)



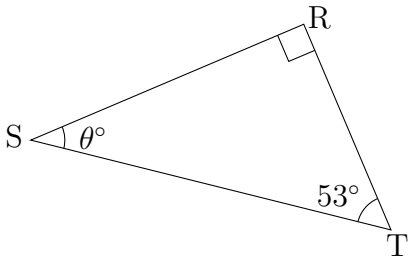
$$\begin{aligned}\angle \mathrm{S} &= 90^\circ - \angle \mathrm{R} \\ &= 90^\circ - 31^\circ \\ &= 59^\circ\end{aligned}$$

(11)



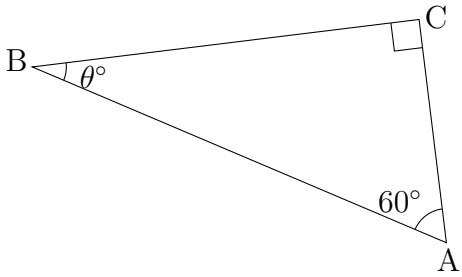
$$\begin{aligned}\angle \mathrm{A} &= 90^\circ - \angle \mathrm{B} \\ &= 90^\circ - 25^\circ \\ &= 65^\circ\end{aligned}$$

(12)



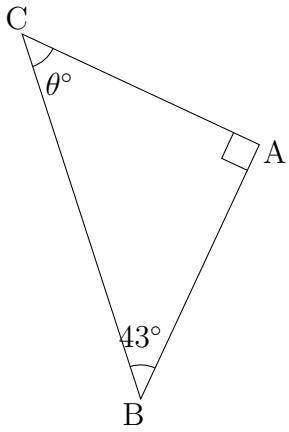
$$\begin{aligned}\angle \mathrm{S} &= 90^\circ - \angle \mathrm{T} \\ &= 90^\circ - 53^\circ \\ &= 37^\circ\end{aligned}$$

(13)



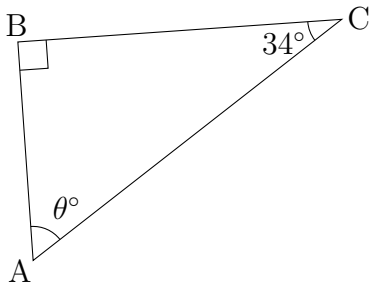
$$\begin{aligned}\angle \mathrm{B} &= 90^\circ - \angle \mathrm{A} \\ &= 90^\circ - 60^\circ \\ &= 30^\circ\end{aligned}$$

(14)



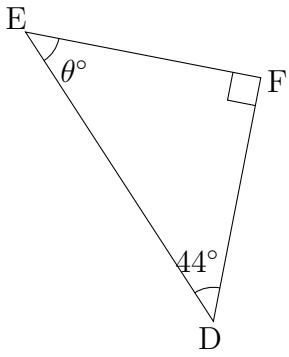
$$\begin{aligned}\angle C &= 90^\circ - \angle B \\ &= 90^\circ - 43^\circ \\ &= 47^\circ\end{aligned}$$

(15)



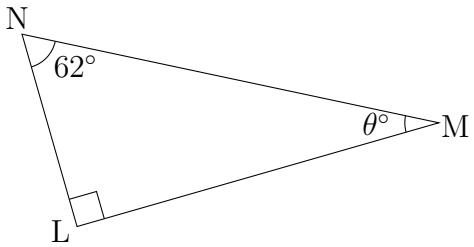
$$\begin{aligned}\angle A &= 90^\circ - \angle C \\ &= 90^\circ - 34^\circ \\ &= 56^\circ\end{aligned}$$

(16)



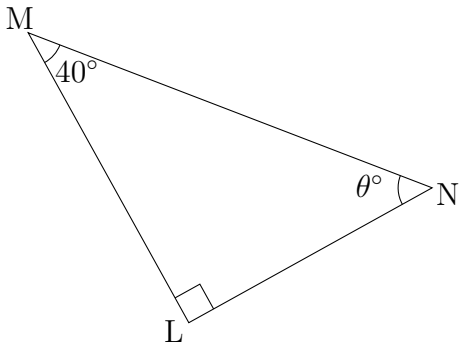
$$\begin{aligned}\angle E &= 90^\circ - \angle D \\ &= 90^\circ - 44^\circ \\ &= 46^\circ\end{aligned}$$

(17)



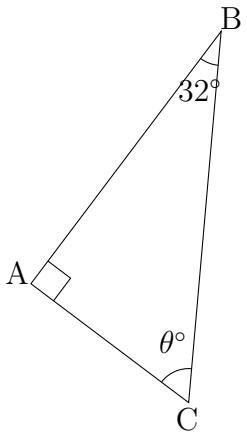
$$\begin{aligned}\angle M &= 90^\circ - \angle N \\ &= 90^\circ - 62^\circ \\ &= 28^\circ\end{aligned}$$

(18)



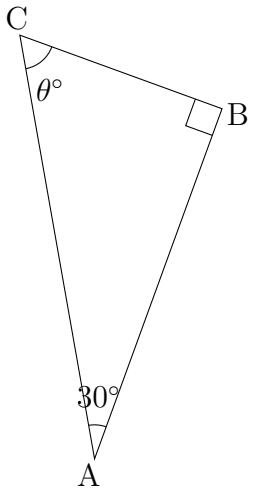
$$\begin{aligned}\angle \mathrm{N} &= 90^\circ - \angle \mathrm{M} \\ &= 90^\circ - 40^\circ \\ &= 50^\circ\end{aligned}$$

(19)



$$\begin{aligned}\angle \mathrm{C} &= 90^\circ - \angle \mathrm{B} \\ &= 90^\circ - 32^\circ \\ &= 58^\circ\end{aligned}$$

(20)



$$\begin{aligned}\angle \mathrm{C} &= 90^\circ - \angle \mathrm{A} \\ &= 90^\circ - 30^\circ \\ &= 60^\circ\end{aligned}$$