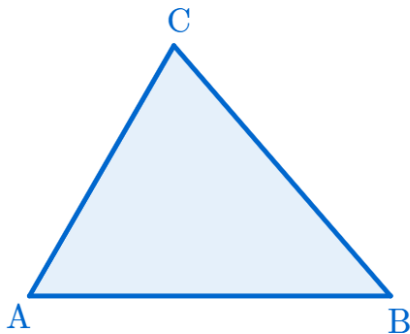


삼각비의 활용($\overline{AB} = 5$, $\overline{AC} = 4$,
 $\angle A = 60^\circ$)

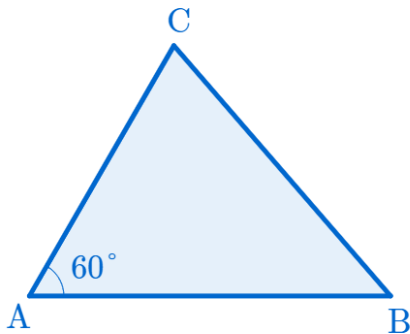
(Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$))

Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)

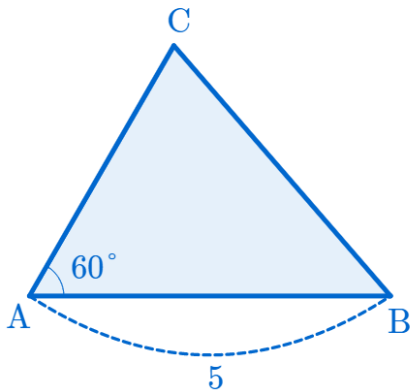
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



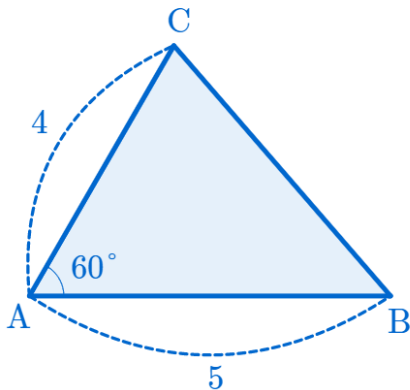
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



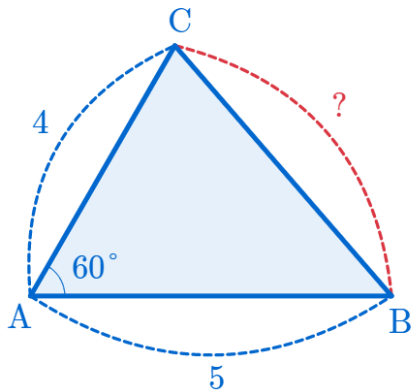
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



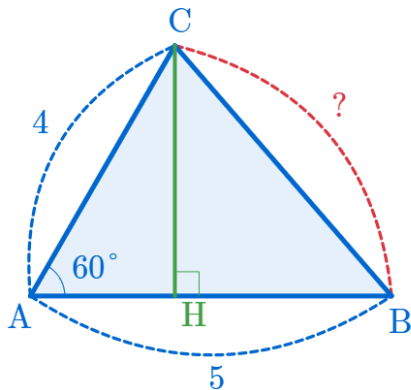
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



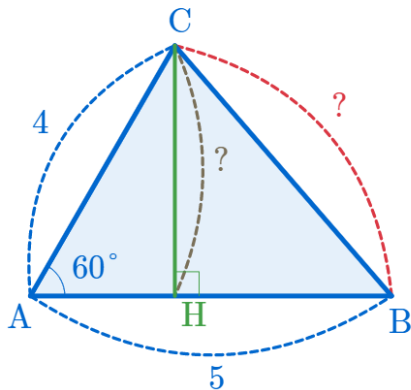
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



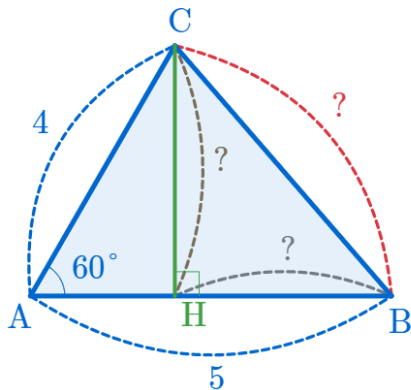
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



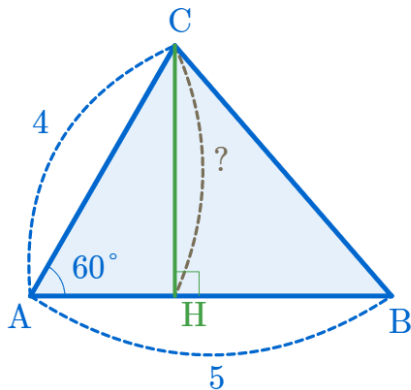
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



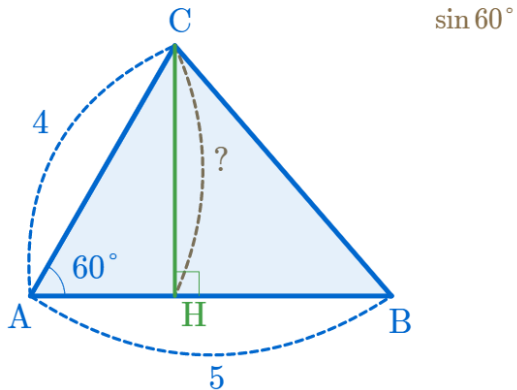
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



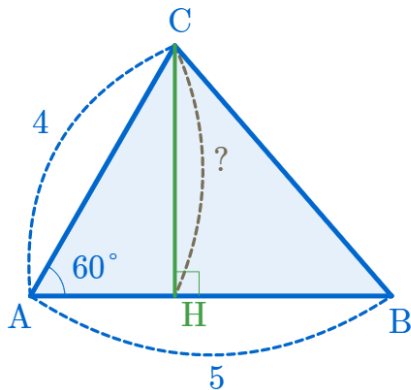
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)

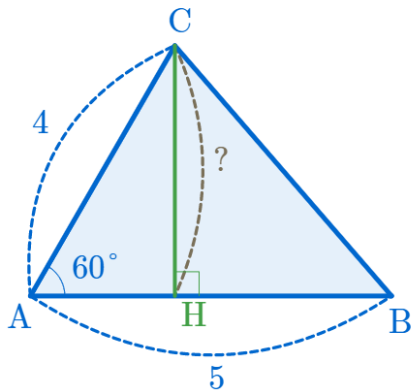


Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4}$$

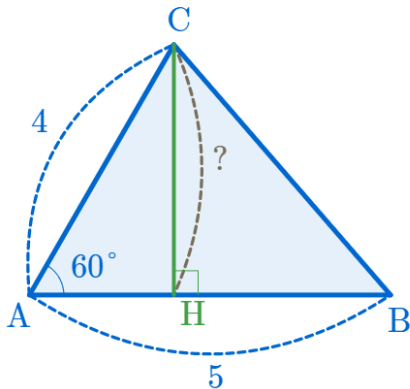
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4}$$

\overline{CH}

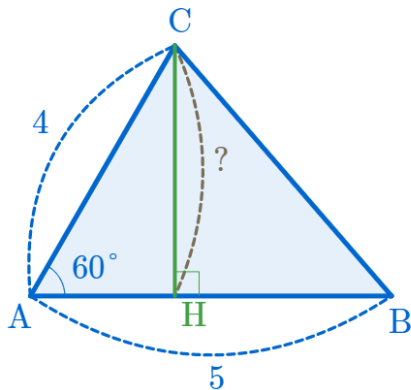
Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{\text{CH}}}{4}$$

$$\overline{CH} = 4 \sin 60^\circ$$

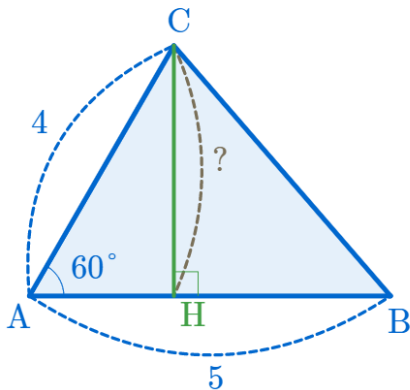
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4}$$

$$\begin{aligned}\overline{CH} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)

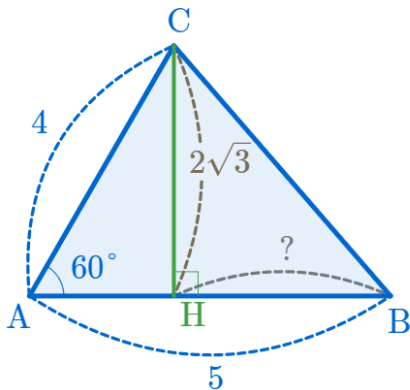


$$\sin 60^\circ = \frac{\overline{\text{CH}}}{4}$$

$$\begin{aligned}\overline{\text{CH}} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\therefore \overline{\text{CH}} = 2\sqrt{3}$$

Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)

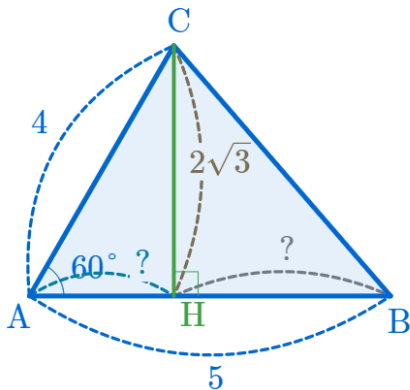


$$\sin 60^\circ = \frac{\overline{\text{CH}}}{4}$$

$$\begin{aligned}\overline{\text{CH}} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\therefore \overline{\text{CH}} = 2\sqrt{3}$$

Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)

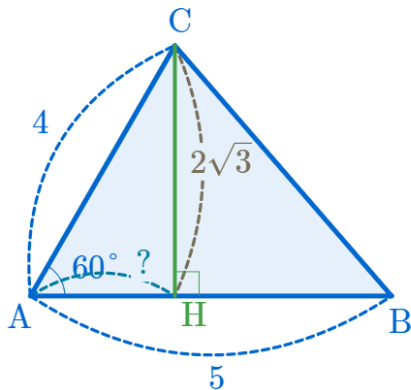


$$\sin 60^\circ = \frac{\overline{\text{CH}}}{4}$$

$$\begin{aligned}\overline{\text{CH}} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\therefore \overline{\text{CH}} = 2\sqrt{3}$$

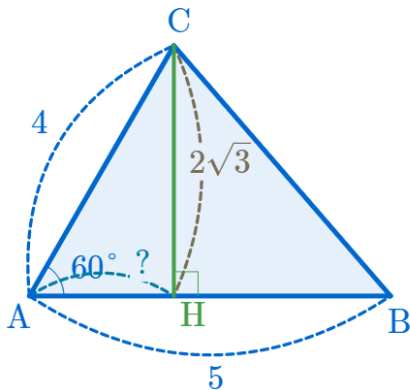
Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4} \quad \cos 60^\circ$$

$$\begin{aligned}\overline{CH} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\therefore \overline{CH} = 2\sqrt{3}$$

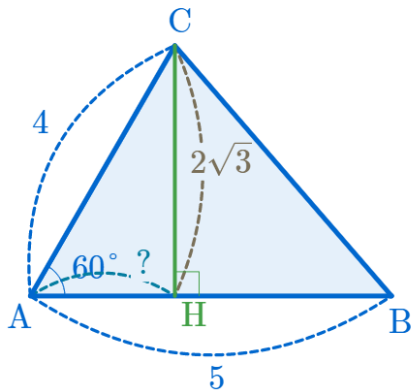


$$\sin 60^\circ = \frac{\overline{CH}}{4} \quad \cos 60^\circ = \frac{\overline{AH}}{4}$$

$$\begin{aligned}\overline{CH} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\therefore \overline{CH} = 2\sqrt{3}$$

Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4}$$

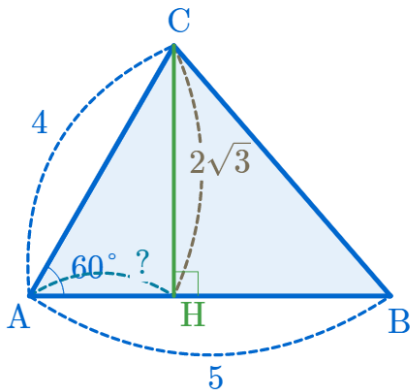
$$\cos 60^\circ = \frac{\overline{AH}}{4}$$

$$\begin{aligned}\overline{CH} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\overline{AH} = 4 \cos 60^\circ$$

$$\therefore \overline{CH} = 2\sqrt{3}$$

Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4}$$

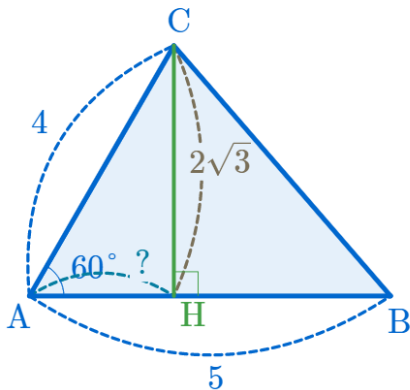
$$\cos 60^\circ = \frac{\overline{AH}}{4}$$

$$\begin{aligned}\overline{CH} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\begin{aligned}\overline{AH} &= 4 \cos 60^\circ \\ &= 4 \times \frac{1}{2}\end{aligned}$$

$$\therefore \overline{CH} = 2\sqrt{3}$$

Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{\text{CH}}}{4}$$

$$\cos 60^\circ = \frac{\overline{AH}}{4}$$

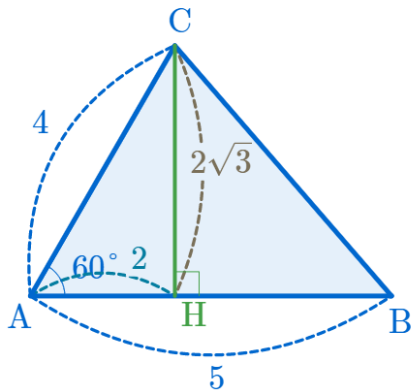
$$\begin{aligned}\overline{\text{CH}} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\begin{aligned}\overline{\text{AH}} &= 4 \cos 60^\circ \\ &= 4 \times \frac{1}{2}\end{aligned}$$

$$\therefore \overline{\text{CH}} = 2\sqrt{3}$$

$$\therefore \overline{AH} = 2$$

Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4}$$

$$\cos 60^\circ = \frac{\overline{AH}}{4}$$

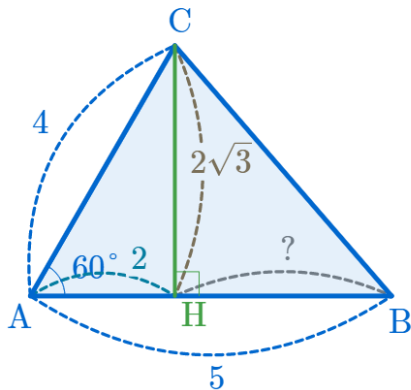
$$\begin{aligned}\overline{CH} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\therefore \overline{CH} = 2\sqrt{3}$$

$$\begin{aligned}\overline{AH} &= 4 \cos 60^\circ \\ &= 4 \times \frac{1}{2}\end{aligned}$$

$$\therefore \overline{AH} = 2$$

Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{\text{CH}}}{4}$$

$$\cos 60^\circ = \frac{\overline{AH}}{4}$$

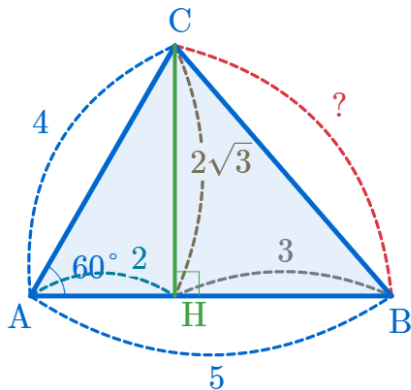
$$\begin{aligned}\overline{\text{CH}} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\begin{aligned}\overline{\text{AH}} &= 4 \cos 60^\circ \\ &= 4 \times \frac{1}{2}\end{aligned}$$

$$\therefore \overline{\text{CH}} = 2\sqrt{3}$$

$$\therefore \overline{AH} = 2$$

Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{\text{CH}}}{4}$$

$$\cos 60^\circ = \frac{\overline{AH}}{4}$$

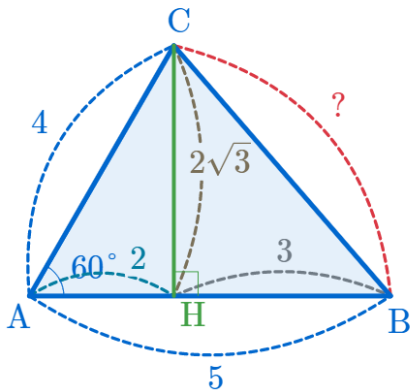
$$\begin{aligned}\overline{\text{CH}} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

$$\begin{aligned}\overline{AH} &= 4 \cos 60^\circ \\ &= 4 \times \frac{1}{2}\end{aligned}$$

$$\therefore \overline{\text{CH}} = 2\sqrt{3}$$

$$\therefore \overline{AH} = 2$$

Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{\text{CH}}}{4}$$

$$\cos 60^\circ = \frac{\overline{AH}}{4}$$

$$\begin{aligned}\overline{\text{CH}} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

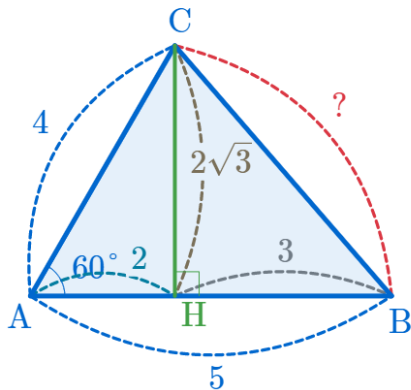
$$\begin{aligned}\overline{\text{AH}} &= 4 \cos 60^\circ \\ &= 4 \times \frac{1}{2}\end{aligned}$$

$$\therefore \overline{\text{CH}} = 2\sqrt{3}$$

$$\therefore \overline{AH} = 2$$

\overline{BC}^2

Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4}$$

$$\cos 60^\circ = \frac{\overline{AH}}{4}$$

$$\begin{aligned}\overline{CH} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

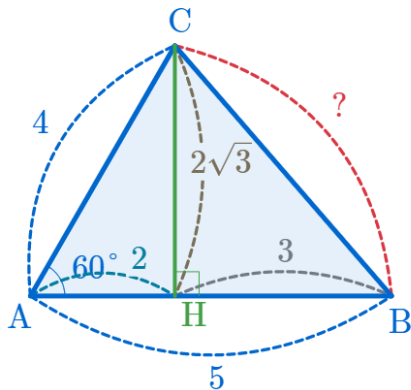
$$\begin{aligned}\overline{AH} &= 4 \cos 60^\circ \\ &= 4 \times \frac{1}{2}\end{aligned}$$

$$\therefore \overline{CH} = 2\sqrt{3}$$

$$\therefore \overline{AH} = 2$$

$$\overline{BC}^2 = (2\sqrt{3})^2 + 3^2$$

Application of Trigonometric Ratio($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4}$$

$$\cos 60^\circ = \frac{\overline{AH}}{4}$$

$$\begin{aligned}\overline{CH} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

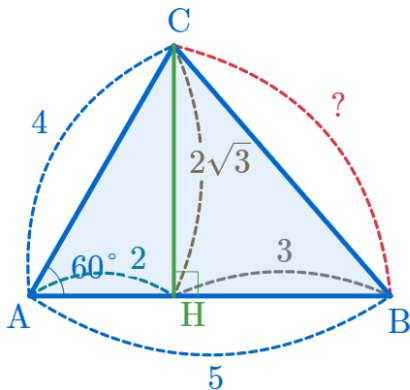
$$\begin{aligned}\overline{AH} &= 4 \cos 60^\circ \\ &= 4 \times \frac{1}{2}\end{aligned}$$

$$\therefore \overline{CH} = 2\sqrt{3}$$

$$\therefore \overline{AH} = 2$$

$$\overline{BC}^2 = (2\sqrt{3})^2 + 3^2 = 12 + 9$$

Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{\text{CH}}}{4}$$

$$\cos 60^\circ = \frac{\overline{AH}}{4}$$

$$\begin{aligned}\overline{\text{CH}} &= 4 \sin 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2}\end{aligned}$$

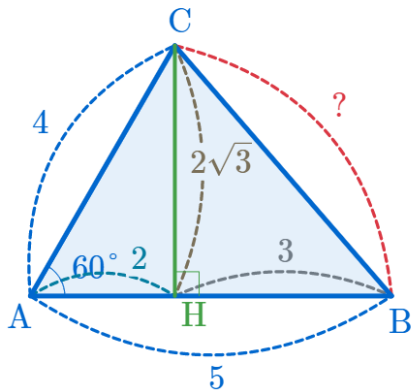
$$\begin{aligned}\overline{AH} &= 4 \cos 60^\circ \\ &= 4 \times \frac{1}{2}\end{aligned}$$

$$\therefore \overline{\text{CH}} = 2\sqrt{3}$$

$$\therefore \overline{AH} = 2$$

$$\overline{BC}^2 = (2\sqrt{3})^2 + 3^2 = 12 + 9 = 21$$

Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4} \quad \cos 60^\circ = \frac{\overline{AH}}{4}$$

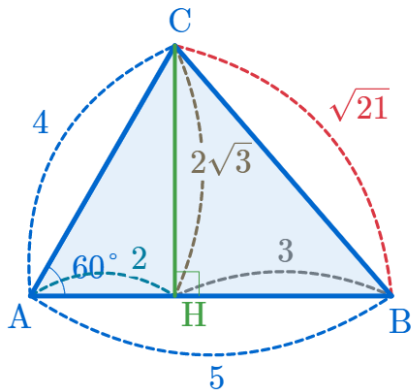
$$\begin{aligned} \overline{CH} &= 4 \sin 60^\circ & \overline{AH} &= 4 \cos 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2} & &= 4 \times \frac{1}{2} \end{aligned}$$

$$\therefore \overline{CH} = 2\sqrt{3} \quad \therefore \overline{AH} = 2$$

$$\overline{BC}^2 = (2\sqrt{3})^2 + 3^2 = 12 + 9 = 21$$

$$\therefore \overline{BC} = \sqrt{21}$$

Application of Trigonometric Ratio ($\overline{AB} = 5$, $\overline{AC} = 4$, $\angle A = 60^\circ$)



$$\sin 60^\circ = \frac{\overline{CH}}{4} \quad \cos 60^\circ = \frac{\overline{AH}}{4}$$

$$\begin{aligned} \overline{CH} &= 4 \sin 60^\circ & \overline{AH} &= 4 \cos 60^\circ \\ &= 4 \times \frac{\sqrt{3}}{2} & &= 4 \times \frac{1}{2} \end{aligned}$$

$$\therefore \overline{CH} = 2\sqrt{3} \quad \therefore \overline{AH} = 2$$

$$\overline{BC}^2 = (2\sqrt{3})^2 + 3^2 = 12 + 9 = 21$$

$$\therefore \overline{BC} = \sqrt{21}$$

Github:

<https://min7014.github.io/math20200126001.html>

Click or paste URL into the URL search bar, and you can see a picture moving.