

2.感謝 waiye 老師解答

$$AB^2 - AC^2 = AB \times BC$$

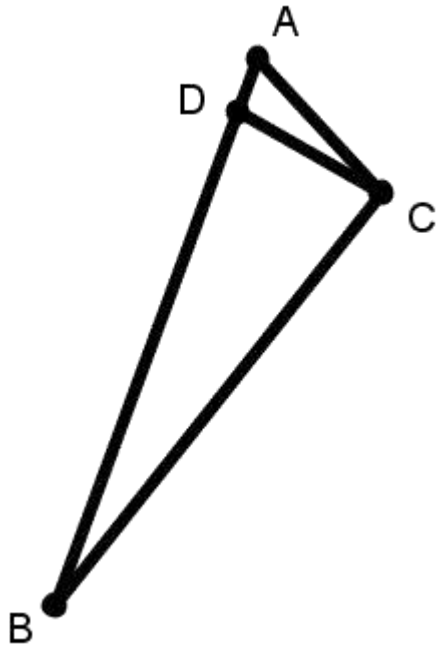
$$\Rightarrow AB(AB-BC) = AC^2$$

$$\Rightarrow AB/AC = AC/(AB-BC)$$

在 AB 上取 D，使得 BC=BD

$$\text{則 } AB/AC = AC/AD$$

$$\Rightarrow \triangle ADC \sim \triangle ACB$$



令  $\angle ABC = x^\circ$ ，則

$$\because \triangle ADC \sim \triangle ACB \therefore \angle ACD = x^\circ$$

$$\because BC = DC \therefore \angle BCD = 90^\circ - (x/2)^\circ$$

$$\triangle ABC \text{ 的內角和} = 63^\circ + [x^\circ + 90^\circ - (x/2)^\circ] + x^\circ = 180^\circ$$

$$\Rightarrow x^\circ = 18^\circ$$