

This book has permission to use the "N&K method of COLORS".

19) Question: In a triangle, where one of the angles is 90° , one of the other two angles is α .

$$\text{If } \sin \alpha = \frac{8}{10}$$

What is the value of $\cos \alpha$?

nw,nc

For speed, while solving something similar, only **THINK** the words in blue; **WRITE** only the words in other **COLORS**.

- Given: 1) In a triangle, one of the angles is 90°
2) one of the other two angles is α
3) $\sin \alpha = \frac{8}{10}$

Solve: What is the value of $\cos \alpha$?

Road Map of Solution:

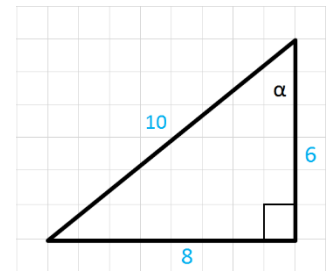
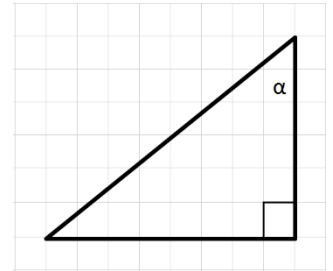
First Step: Sketch a triangle, where one of the angles is 90° .

Second Step: Mark one of the remaining angles as " α ".

Third Step: Mark the appropriate sides as "8" and "10" units long.

Fourth Step: Use Pythagorean Theorem to find the length of the remaining side.

Fifth Step: Find the value of $\cos \alpha$.



Based on the lower sketch $\sin \alpha = \frac{8}{10}$

Based on the lower sketch $\cos \alpha = \frac{6}{10}$ **Answer**