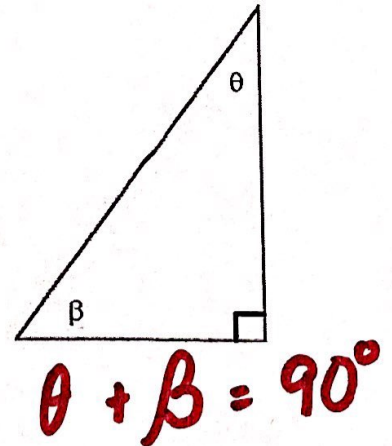
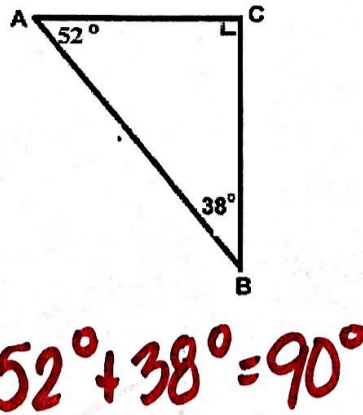
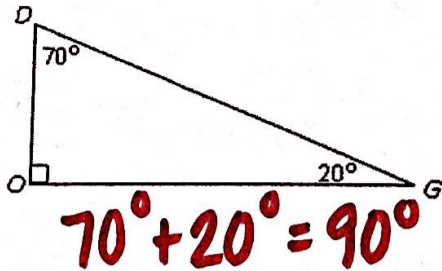


Sine and Cosine of Complementary Angles

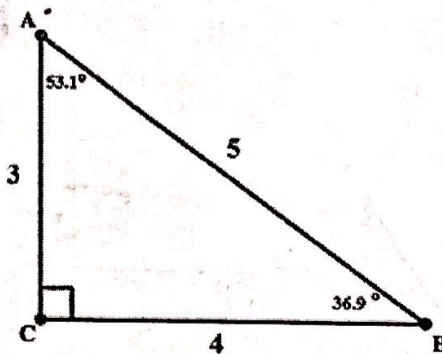
- Two angles are **complementary** if the sum of their measure is 90° .
- An **acute** angle measures less than 90° .
- In a right triangle the two non-right angles are complementary and acute.



Find the sine and cosine of angles A and B.

$$\begin{aligned} \sin(A) &= \frac{4}{5} & \sin(B) &= \frac{3}{5} \\ \cos(A) &= \frac{3}{5} & \cos(B) &= \frac{4}{5} \end{aligned}$$

$$\begin{aligned} \sin A &= \cos B \\ \cos A &= \sin B \end{aligned}$$



If θ and β are the acute and complementary angles in a right triangle, then:

$$\sin(\theta) = \cos(\beta) \quad \text{and} \quad \sin(\beta) = \cos(\theta)$$

$$\theta + \beta = 90^\circ$$