

# COMPLEMENTARY TRIG. FUNCTIONS

$$\text{SIN} - \text{COS}$$

$$\text{SEC} - \text{CSC}$$

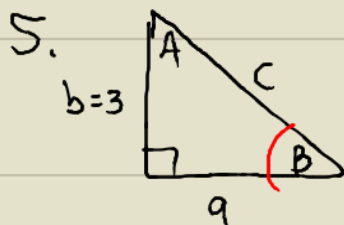
$$\text{TAN} - \text{COT}$$

$$4. \frac{\text{COS } 40^\circ}{\text{SIN } 50^\circ}$$

$$= \frac{\text{SIN}(90^\circ - 40^\circ)}{\text{SIN } 50^\circ}$$

$$= \frac{\text{SIN } 50^\circ}{\text{SIN } 50^\circ}$$

= ①



$$b=3$$

$$B=15^\circ$$

$$C=90^\circ$$

A

$$A = 180^\circ - B - C$$

$$A = 180^\circ - 15^\circ - 90^\circ$$

$$\boxed{A = 75^\circ}$$

a

$$\text{TAN } B = \frac{\text{opp}}{\text{adj}}$$

$$\text{TAN } B = \frac{b}{a}$$

$$\text{TAN } 15^\circ = \frac{3}{a}$$

$$a \text{ TAN } 15^\circ = 3$$

$$a = \frac{3}{\text{TAN } 15^\circ}$$

$$\boxed{a = 11.20}$$

c

$$\text{SIN } B = \frac{\text{opp}}{\text{hyp}}$$

$$\text{SIN } B = \frac{b}{c}$$

$$\text{SIN } 15^\circ = \frac{3}{c}$$

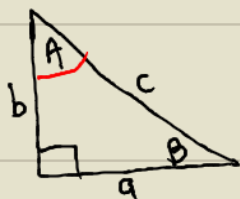
$$c \text{ SIN } 15^\circ = 3$$

$$c = \frac{3}{\text{SIN } 15^\circ}$$

$$\boxed{c = 11.59}$$

$$6. \quad b=5$$

$$A=25^\circ$$



$$C=90^\circ$$

B

$$B = 180^\circ - A - C$$

$$B = 180^\circ - 25^\circ - 90^\circ$$

$$\boxed{B = 65^\circ}$$

a

$$\text{TAN } A = \frac{\text{opp}}{\text{adj}}$$

$$\text{TAN } A = \frac{a}{b}$$

$$\text{TAN } 25^\circ = \frac{a}{5}$$

$$5 \text{ TAN } 25^\circ = a$$

$$\boxed{2.33 = a}$$

c

$$\text{COS } A = \frac{\text{adj}}{\text{hyp}}$$

$$\text{COS } A = \frac{b}{c}$$

$$\text{COS } 25^\circ = \frac{5}{c}$$

$$c \text{ COS } 25^\circ = 5$$

$$c = \frac{5}{\text{COS } 25^\circ}$$

$$\boxed{c = 5.52}$$