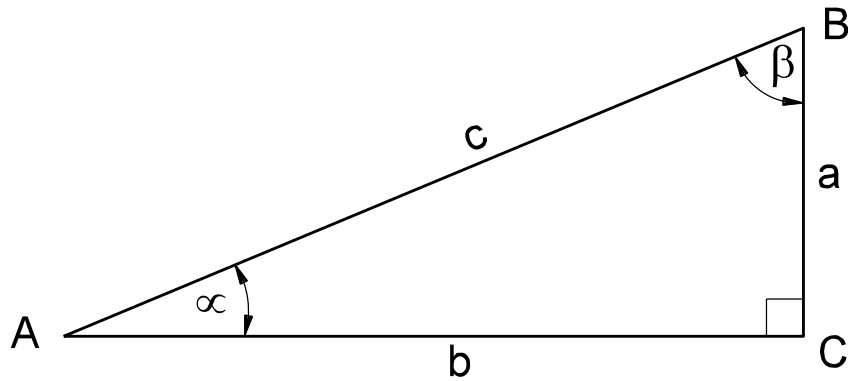




Let $BC = a$, $AC = b$, $AB = c$. Then:

$$1. \sin \alpha = \frac{a}{c}$$

$$2. \cos \alpha = \frac{b}{c}$$

$$3. \tan \alpha = \frac{a}{b}$$

$$4. \csc \alpha = \frac{1}{\sin \alpha} = \frac{c}{a}$$

$$5. \sec \alpha = \frac{1}{\cos \alpha} = \frac{c}{b}$$

$$6. \cot \alpha = \frac{1}{\tan \alpha} = \frac{b}{a}$$

$$7. \text{vers } \alpha = 1 - \cos \alpha$$

$$8. \text{covers } \alpha = 1 - \sin \alpha$$

$$9. \text{exsec } \alpha = (\sec \alpha) - 1$$

$$10. \text{coexsec } \alpha = (\csc \alpha) - 1$$

$$11. a^2 + b^2 = c^2$$

$$12. \alpha + \beta = 90^\circ$$

$$13. \text{Area} = \frac{1}{2} ab$$

BASIC TRIGONOMETRIC FUNCTIONS

Figure 43-6B