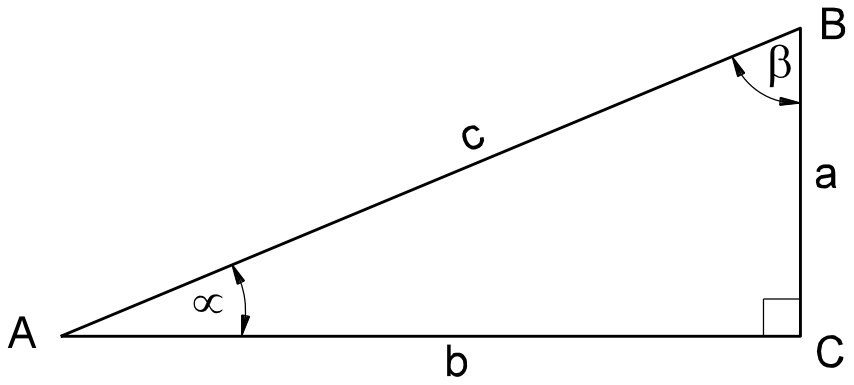

Let BC = a, AC = b, AB = c. Then:

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

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

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

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

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

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

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

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

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

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

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

12. $\propto + \beta = 90°$

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

BASIC TRIGONOMETRIC FUNCTIONS

Figure 43-6B