$$sen^2\alpha + \cos^2\alpha = 1 \qquad tg\alpha = \frac{sen\alpha}{\cos\alpha} \qquad 1 + tg^2\alpha = \frac{1}{\cos^2\alpha}$$

$$sen(\alpha+\beta) = sen\alpha \cdot \cos\beta + \cos\alpha \cdot sen\beta \qquad sen(2\alpha) = 2 \cdot sen\alpha \cdot \cos\alpha$$

$$\cos(\alpha+\beta) = \cos\alpha \cdot \cos\beta - sen\alpha \cdot sen\beta \qquad \cos(2\alpha) = \cos^2\alpha - sen^2\alpha$$

$$tg(\alpha+\beta) = \frac{tg\alpha + tg\beta}{1 - tg\alpha \cdot tg\beta} \qquad tg(2\alpha) = \frac{2tg\alpha}{1 - tg^2\alpha}$$

$$sen(\alpha-\beta) = sen\alpha \cdot \cos\beta - \cos\alpha \cdot sen\beta \qquad sen(\frac{\alpha}{2}) = \pm\sqrt{\frac{1-\cos\alpha}{2}}$$

$$\cos(\alpha-\beta) = \cos\alpha \cdot \cos\beta + sen\alpha \cdot sen\beta \qquad \cos(\frac{\alpha}{2}) = \pm\sqrt{\frac{1+\cos\alpha}{2}}$$

$$tg(\alpha-\beta) = \frac{tg\alpha - tg\beta}{1 + tg\alpha \cdot tg\beta} \qquad tg(\frac{\alpha}{2}) = \pm\sqrt{\frac{1-\cos\alpha}{1+\cos\alpha}}$$

$$\sec\alpha = \frac{1}{\cos\alpha}$$

$$cosec\alpha = \frac{1}{\sin\alpha}$$

$$\cot\alpha = \frac{1}{\tan\alpha}$$