Suma y resta de ángulos:

$$sen(\alpha \pm \beta) = sen\alpha \cdot cos\beta \pm cos\alpha \cdot sen\beta$$

$$cos(\alpha \pm \beta) = cos\alpha \cdot cos\beta \mp sen\alpha \cdot sen\beta$$

$$tg(\alpha \pm \beta) = \frac{tg\alpha \pm tg\beta}{1 \mp tg\alpha \cdot tg\beta}$$

Ángulo doble: | ## Ángulo mitad

$$sen(2\alpha) = 2sen\alpha \cdot cos\alpha$$

$$sen\left(\frac{\alpha}{2}\right) = \pm\sqrt{\frac{1 - cos\alpha}{2}}$$

$$cos(2\alpha) = cos^2\alpha - sen^2\alpha$$

$$cos\left(\frac{\alpha}{2}\right) = \pm\sqrt{\frac{1 + cos\alpha}{2}}$$

$$tg(2\alpha) = \frac{2tg\alpha}{1 - tg^2\alpha}$$

$$tg\left(\frac{\alpha}{2}\right) = \pm\sqrt{\frac{1 - cos\alpha}{1 + cos\alpha}}$$