

$$1 = \sin^2(a) + \cos^2(a)$$

$$\sin(a \pm b) = \sin a \cos b \pm \cos a \sin b$$

$$\cos(a \pm b) = \cos a \cos b \mp \sin a \sin b$$

$$\cos(na) = \operatorname{re} (\cos a + i \sin a)^n$$

$$\sin(na) = \operatorname{im} (\cos a + i \sin a)^n$$

$$\tan \left(\frac{a + b}{2} \right) = \frac{\sin a + \sin b}{\cos a + \cos b}$$