Pythagorean:

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

$1 + \cot^2 a = \csc^2 a$

$1 + \tan^2 a = \sec^2 a$

Double-Angle:

AP* $\sin(2a) = 2\sin a \cos a$

class $\cos(2a) = \cos^2 a - \sin^2 a$

$2\cos^2 a - 1$

$1 - 2\sin^2 a$

Power-Reducing:

$$\sin^2 a = \frac{1 - \cos(2a)}{2}$$

$$\cos^2 a = \frac{1 + \cos(2a)}{2}$$