

Unit 4.5 Multiple-Angle Identities NOTES

Double Angle Identities

$$\begin{aligned}\textbf{#15} \quad \cos(2\theta) &= \cos^2\theta - \sin^2\theta \\ &= 2\cos^2\theta - 1 \\ &= 1 - 2\sin^2\theta\end{aligned}$$

$$\textbf{#16} \quad \sin(2\theta) = 2 \sin \theta \cos \theta$$

$$\textbf{#14} \quad \tan 2\theta = \frac{2\tan \theta}{1-\tan^2\theta}$$