

Recall (Appendix D page A24-A31)

Trigonometric Identity

$$\cos^2 x + \sin^2 x = \underline{\hspace{2cm}}.$$

$$\cos^2 x = \underline{\hspace{2cm}}.$$

$$\sin^2 x = \underline{\hspace{2cm}}.$$

$$\sec^2 x = \underline{\hspace{2cm}}.$$

$$\tan^2 x = \underline{\hspace{2cm}}.$$

Double Angle Formula (Sec 7.2 pg 480 or Appendix D pg A29)

$$\cos 2x = \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}.$$

Deduce the **Half Angle Formulas (Apx. D)**:

$$\cos^2 x = \underline{\hspace{2cm}}.$$

$$\sin^2 x = \underline{\hspace{2cm}}.$$

Derivatives (Sec 3.3 pg 193)

$$\frac{d}{dx}(\sin x) = \underline{\hspace{2cm}}.$$

$$\frac{d}{dx}(\cos x) = \underline{\hspace{2cm}}.$$

$$\frac{d}{dx}(\tan x) = \underline{\hspace{2cm}}.$$

$$\frac{d}{dx}(\sec x) = \underline{\hspace{2cm}}.$$

Useful Anti-Derivatives (Sec 7.2 pg 482-483)

$$\int \tan x \, dx = \underline{\hspace{2cm}}.$$

$$\int \sec x \, dx = \underline{\hspace{2cm}}.$$