

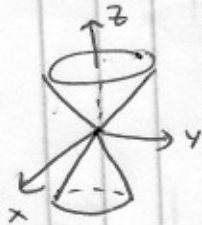
~~sect = sector~~

$$\sin^2 u = \frac{1 - \cos 2u}{2}$$

$$\cos^2 u = \frac{1 + \cos 2u}{2}$$

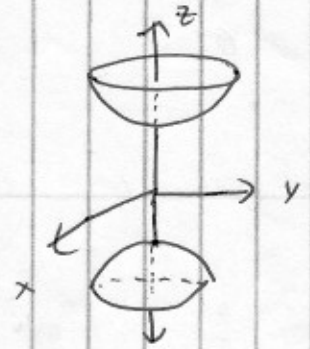
cone

$$\frac{z^2}{c^2} = \frac{x^2}{a^2} + \frac{y^2}{b^2}$$



hyperboloid of 2 sheets

$$-\frac{x^2}{a^2} - \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$$



~~$\csc = -\cot$~~

$$\int \sec x \, dx = \ln |\sec x + \tan x| + C$$

$$\int \ln u \, du = u \ln u - u + C$$

$$\int \cos^2 \theta \, d\theta = \int \frac{1 + \cos 2\theta}{2} \, d\theta$$

$$\cos 2\theta = \cos^2 \theta - \sin^2 \theta$$

$$2\cos^2 \theta - 1$$

$$1 - 2\sin^2 \theta$$

$$\sin 2\theta = 2\sin \theta \cos \theta$$

$$\sin^2 \theta = \frac{1}{2} - \frac{1}{2} \cos 2\theta$$

$$\int \frac{1}{1+x^2} \, dx = \tan^{-1}(x)$$

$$\int \frac{1}{x} \, dx = \ln x$$