

4. Determine the dimensions (height and radius) of a cylindrical soup can that contains a volume of 10 cubic inches and uses a minimum amount of metal.

5. practice:

$$\int x^n dx =$$

$$\int \sin(x) dx =$$

$$\int \cos(x) dx =$$

$$\frac{d}{dx} x^n =$$

$$\frac{d}{d\theta} \sin(\theta) =$$

$$\frac{d}{dt} \cos(t) =$$

$$\frac{d}{dy} \tan(y) =$$

$$\frac{d}{dx} \sec(x) =$$

$$d(x^n) =$$

$$d(\sin(\theta)) =$$

$$d(\cos(t)) =$$

$$d(\tan(y)) =$$

$$d(\sec(x)) =$$