

Mth 112 Class Notes

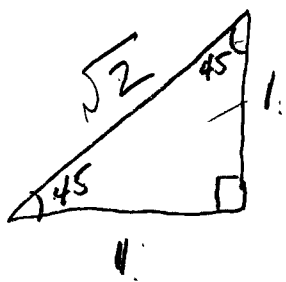
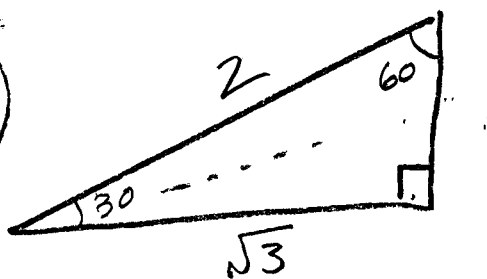
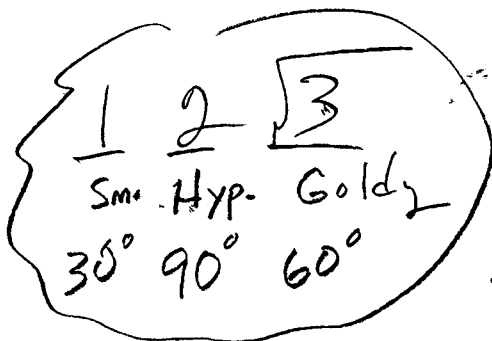
Thursday 8-23-12

Exercise — each student

Derive the quadratic
formula by completing
the square on:

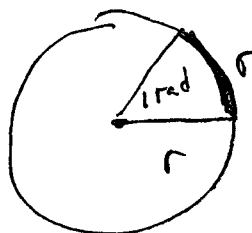
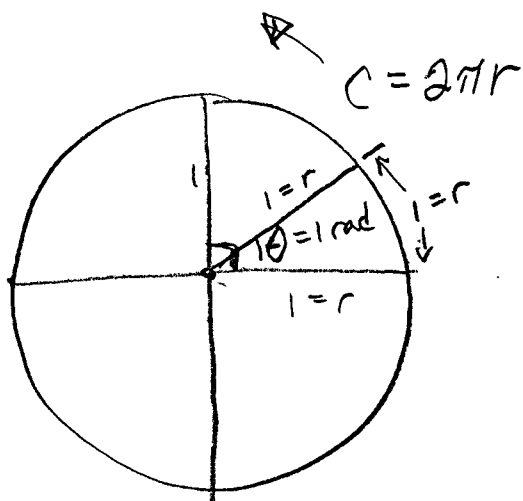
$$ax^2 + bx + c = 0$$

ACT: Topic reviews &
practice problems.



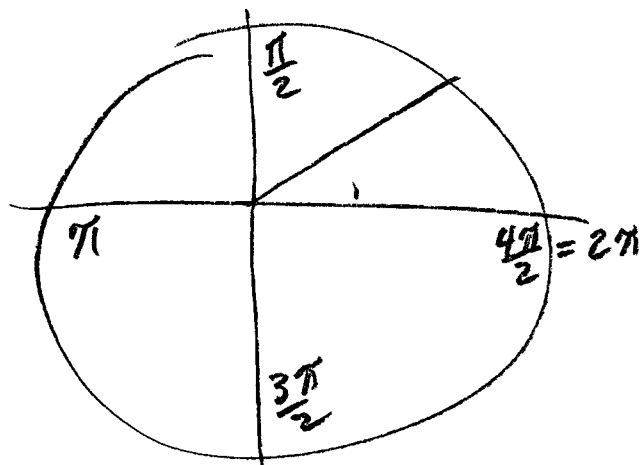
$$\sin 30^\circ = \frac{1}{2} \quad \text{SOHCAHTOA}$$

$$\tan \frac{\pi}{4} = \frac{1}{1} = 1$$

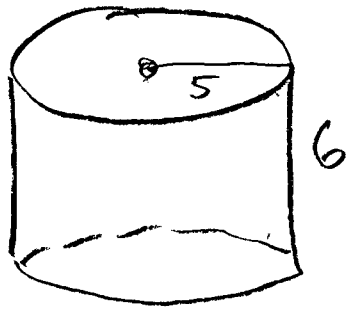


$$\frac{2\pi \text{ rad}}{360 \text{ deg}} = \frac{\pi \text{ rad}}{180 \text{ deg}}$$

DEFINE
RADIAN



(Ex)



height and radius
in meters

Find Volume in m^3

$$A_0 = \pi r^2 = \pi (5)^2 = 25\pi m^2$$

$$V_0 = (A_{\text{base}})(h) = (25\pi)(6) = \boxed{150\pi m^3}$$

(Ex)

Area of circle

$$x^2 + y^2 = 16$$

$$(x-h)^2 + (y-k)^2 = r^2$$

$$r = 4 \quad \therefore A_0 = \pi r^2$$

$$\boxed{A_0 = 16\pi \text{ units}^2}$$

(ex)

$$y = 3 \sin 2x$$

 $\uparrow$
b

$$\text{Period} = \frac{360^\circ}{2} = 180^\circ$$

