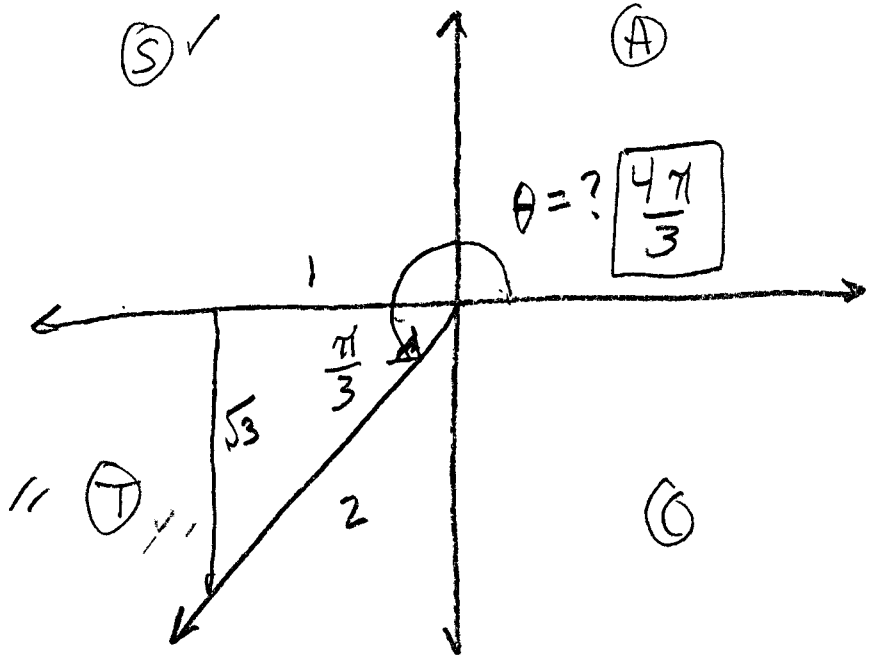
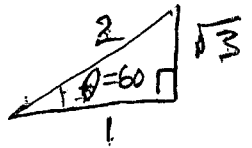


Mth 113 Thurs 1-24-13 CLASS NOTES

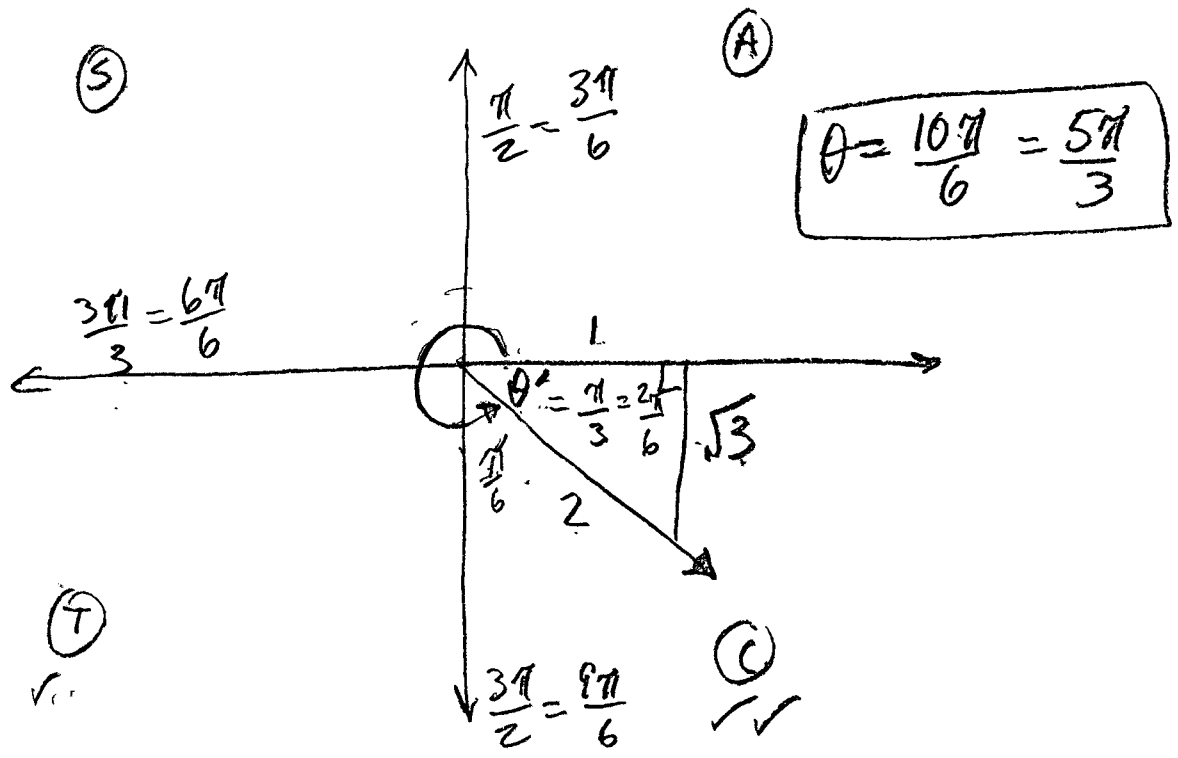
Find least non-neg.  $\theta$ , in radians, s.t.

(27)  $\cos \theta = -\frac{1}{2}$ ,  $\tan \theta > 0$

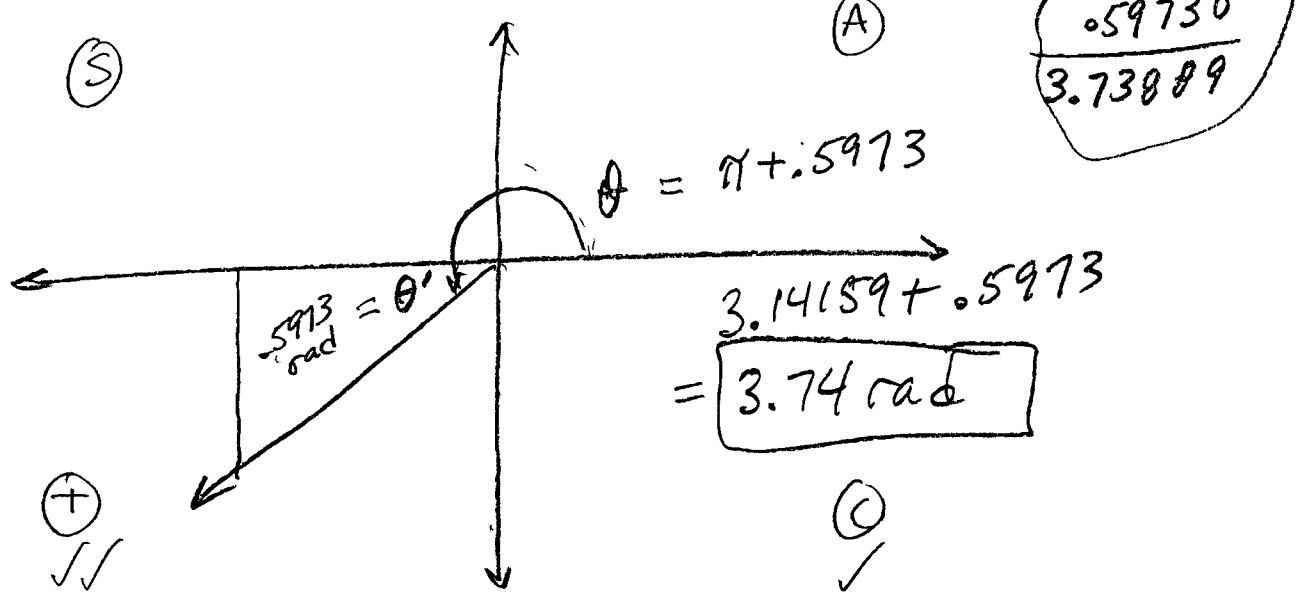
$60^\circ = \frac{\pi}{3}$



29)  $\sin \theta = -\frac{\sqrt{3}}{2}$ ,  $\tan \theta < 0$



34)  $\sin \theta = -0.5624$ ,  $\tan \theta > 0$



301 (55)

$$V = \frac{\sqrt{a^2 + b^2 - 2ab \cos \theta}}{\sin \theta}$$

$$a = 6.2 \text{ cm} \quad b = 3.5 \text{ cm} \quad \theta = 2.6 \text{ rad.}$$

$$V = \frac{\sqrt{(6.2)^2 + (3.5)^2 - 2(6.2)(3.5) \cos(2.6)}}{\sin(2.6)}$$

$$V = \frac{\sqrt{38.44 + 12.25 - (43.4)(0.85688)}}{0.515501}$$

$$V = \frac{\sqrt{50.69 + 37.1885}}{0.515501}$$

$$V = \frac{9.37435}{0.515501}$$

$$V = 18.1849 \approx \boxed{18.18 \text{ cm}}$$