

HW 6-3



$$34. \sin t = -\frac{3\sqrt{13}}{13} \quad \cos t = -\frac{2\sqrt{13}}{13} \quad \tan t = \frac{3}{2} \quad \csc t = -\frac{\sqrt{13}}{3} \quad \sec t = -\frac{\sqrt{13}}{2} \quad \cot t = \frac{2}{3}$$

$$35. \sin t = \frac{5\sqrt{26}}{26} \quad \cos t = -\frac{\sqrt{26}}{26} \quad \tan t = -5 \quad \csc t = \frac{\sqrt{26}}{5} \quad \sec t = -\sqrt{26} \quad \cot t = -\frac{1}{5}$$

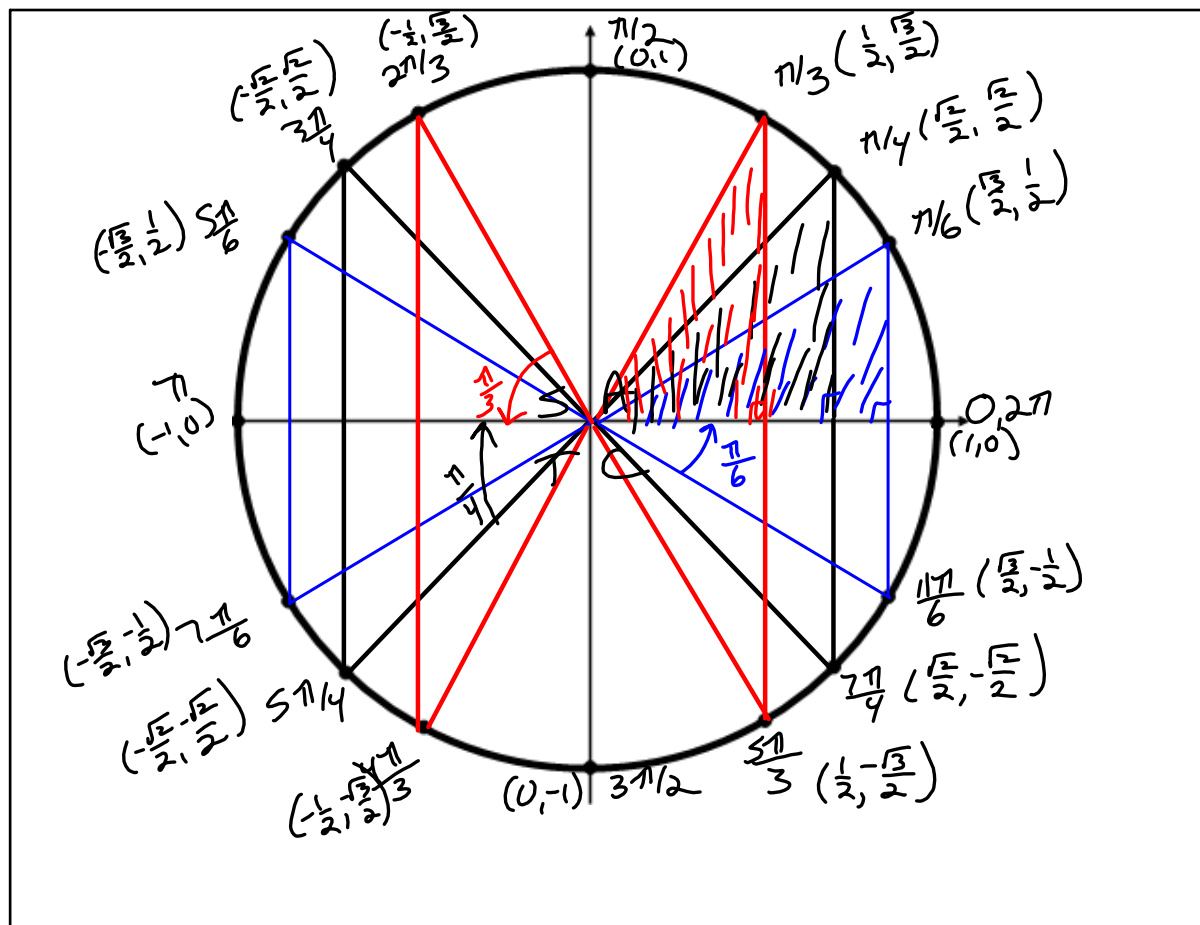
$$38. \sin \frac{7\pi}{4} = -\frac{\sqrt{2}}{2} \quad \cos \frac{7\pi}{4} = \frac{\sqrt{2}}{2} \quad \tan \frac{7\pi}{4} = -1 \quad \csc \frac{7\pi}{4} = -\sqrt{2} \quad \sec \frac{7\pi}{4} = \sqrt{2} \quad \cot \frac{7\pi}{4} = -1$$

$$39. \sin t = \frac{1}{\cos t} \quad 40. \cos t + \sin t$$

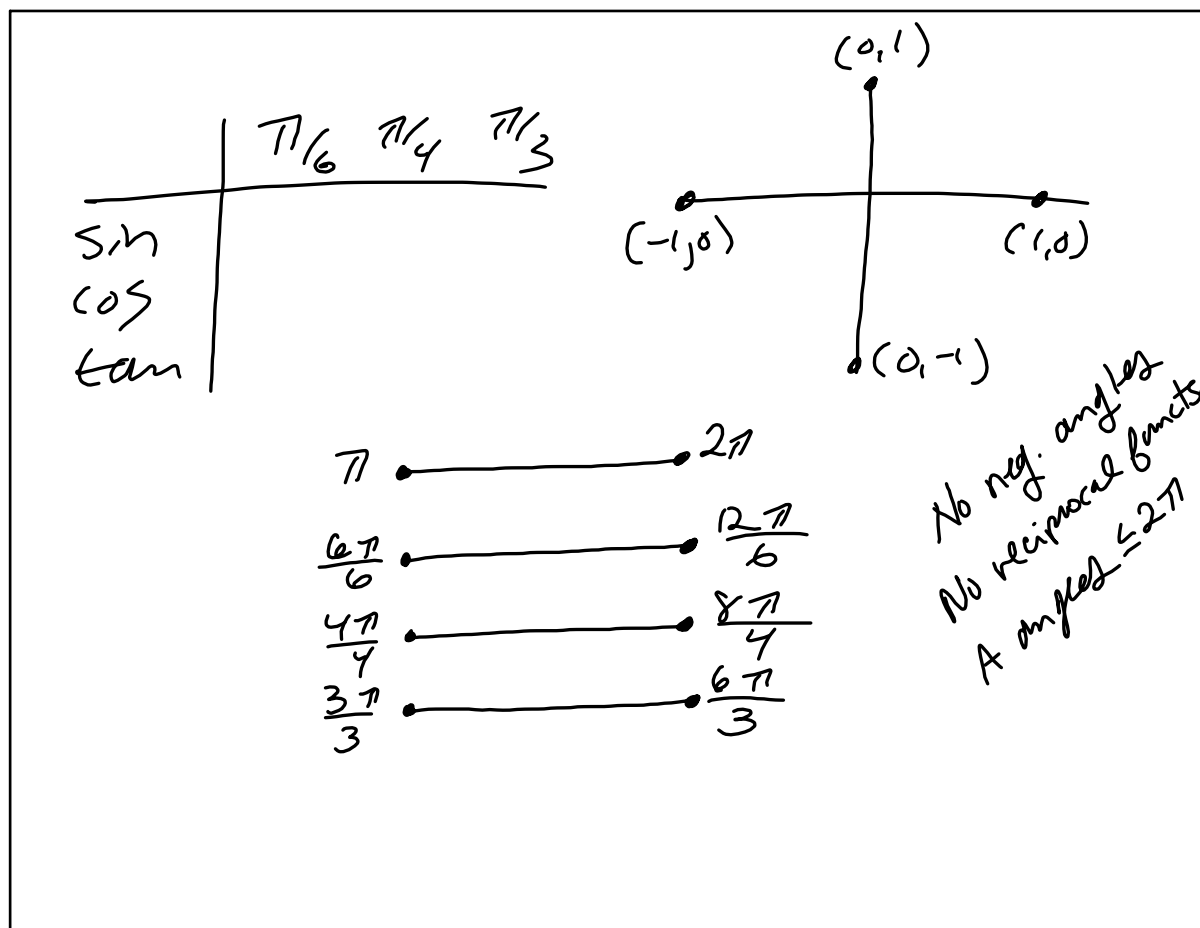
$$41. \sin t = -\frac{\sqrt{3}}{2} \quad \cos t = \frac{1}{2} \quad \tan t = -\sqrt{3} \quad \csc t = -\frac{2\sqrt{3}}{3} \quad \sec t = 2 \quad \cot t = -\frac{\sqrt{3}}{3}$$

$$44. \sin t = \frac{12}{13} \quad \cos t = -\frac{5}{13} \quad \tan t = -\frac{12}{5} \quad \csc t = \frac{13}{12} \quad \sec t = -\frac{13}{5} \quad \cot t = -\frac{5}{12}$$

Dec 4-2:15 PM



Dec 3-8:37 AM



Jan 6-7:31 AM

QUIZ
No
Calc.



Coterminal Angles
Complementary & Supplementary Angles

Dec 3-8:29 AM

Initial side $\rightarrow$ Positive x-axis

$$\theta = 60^\circ$$

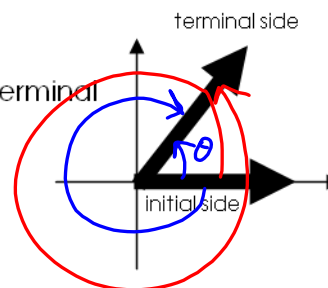
$$60 - 360 = -300^\circ$$

$$60 + 360 = 420^\circ$$

Coterminal Angles $\rightarrow$ Angles that have the same initial and terminal Sides

To find coterminal angles $\rightarrow$ Add or subtract multiples of 2π

$$\theta \pm 2\pi$$



Dec 3-8:31 AM

Find a positive and a negative angle coterminal with the given angle.

1. $\frac{5\pi}{6} \rightarrow \pm 2\pi = \pm \frac{12\pi}{6}$

$$\frac{5\pi}{6} + \frac{12\pi}{6} = \frac{17\pi}{6}$$

$$\frac{5\pi}{6} - \frac{12\pi}{6} = -\frac{7\pi}{6}$$

2. $-\frac{4\pi}{3} \rightarrow \pm 2\pi = \pm \frac{6\pi}{3}$

$$-\frac{4\pi}{3} + \frac{6\pi}{3} = \frac{2\pi}{3}$$

$$-\frac{4\pi}{3} - \frac{6\pi}{3} = -\frac{10\pi}{3}$$

3. $-\frac{7\pi}{4} \rightarrow \pm 2\pi = \pm \frac{8\pi}{4}$

$$-\frac{7\pi}{4} + \frac{8\pi}{4} = \frac{\pi}{4}$$

$$-\frac{7\pi}{4} - \frac{8\pi}{4} = -\frac{15\pi}{4}$$

4. $\frac{\pi}{2} \rightarrow \pm 2\pi = \pm \frac{4\pi}{2}$

$$\frac{\pi}{2} + \frac{4\pi}{2} = \frac{5\pi}{2}$$

$$\frac{\pi}{2} - \frac{4\pi}{2} = -\frac{3\pi}{2}$$

Dec 3-8:32 AM

$60^\circ, 30^\circ$ $90^\circ - 60^\circ = 30^\circ$
 Complementary Angles $\rightarrow$ 2 angles whose sum is $\frac{\pi}{2}$ $\frac{\pi}{2} - \theta$
 $60^\circ, 120^\circ$ $180^\circ - 60^\circ = 120^\circ$
 Supplementary Angles $\rightarrow$ 2 angles whose sum is π $\pi - \theta$

For each of the following, find the complement and the supplement.

5. $\frac{\pi}{12}$

Compl: $\frac{\pi}{2} - \frac{\pi}{12} = \frac{6\pi}{12} - \frac{\pi}{12} = \frac{5\pi}{12}$
 Suppl: $\pi - \frac{\pi}{12} = \frac{12\pi}{12} - \frac{\pi}{12} = \frac{11\pi}{12}$

6. $\frac{2\pi}{15}$

Compl: $\frac{\pi}{2} - \frac{2\pi}{15} = \frac{15\pi}{30} - \frac{4\pi}{15} = \frac{11\pi}{30}$
 Suppl: $\pi - \frac{2\pi}{15} = \frac{15\pi}{15} - \frac{2\pi}{15} = \frac{13\pi}{15}$

Dec 3-8:33 AM

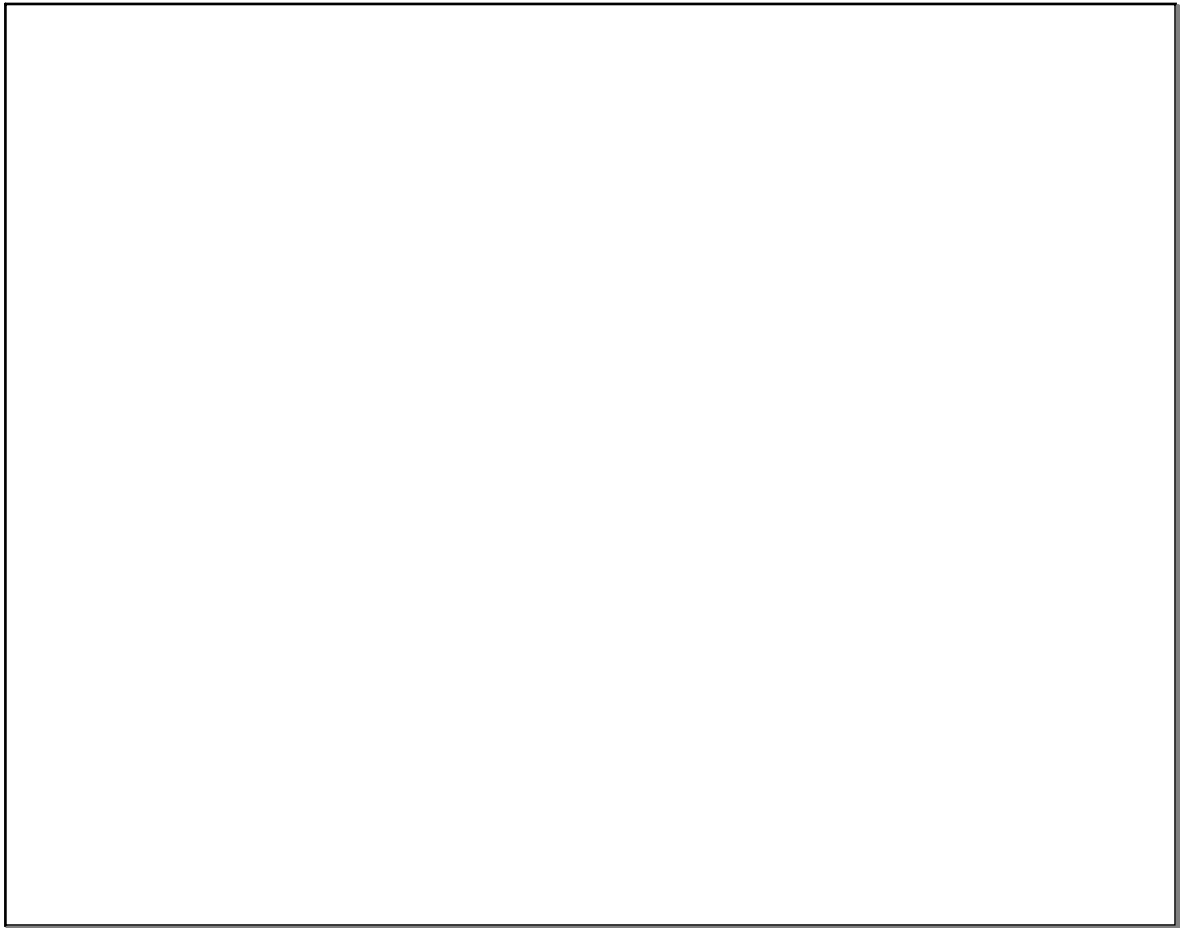
Homework:
pg 483: 10 - 18

Ditto 6.1: 46

Gr HW Due Tomorrow



Dec 3-8:34 AM



Jan 2-7:57 PM