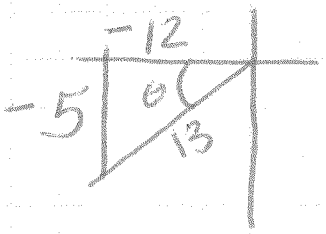
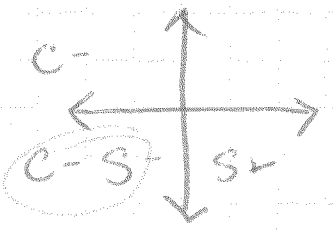
251 36-38, 43-48, 50-55, 104-106

36. $\cos\theta = -\frac{12}{13}$, $\sin\theta < 0$



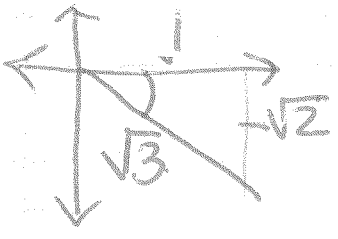


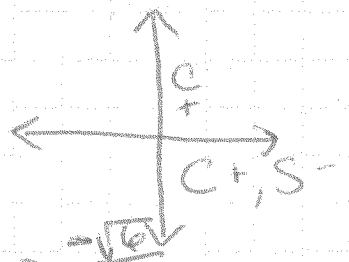
$\sin\theta = -\frac{5}{13}$ $\quad \csc\theta = -\frac{13}{5}$

$\cos\theta = -\frac{12}{13}$ $\quad \sec\theta = -\frac{13}{12}$

$\tan\theta = \frac{5}{12}$ $\quad \cot\theta = \frac{12}{5}$

37. $\sec\theta = \sqrt{3}$ $\quad \sin<0, \cos>0$





$\sin\theta = \frac{-\sqrt{6}}{3}$ $\quad \csc\theta = \frac{-\sqrt{6}}{2}$

$\cos\theta = \frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$ $\quad \sec\theta = \sqrt{3}$

$\tan\theta = -\sqrt{2}$ $\quad \cot\theta = -\frac{\sqrt{2}}{2}$

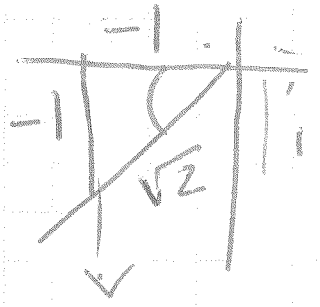
$(\sqrt{3})^2 = 1^2 + x^2$

$3 - 1 = x^2$

$2 = x^2$

$x = \sqrt{2}$

38. $\cot\theta = 1$ $\sin\theta < 0$, $\cos\theta < 0$ 3rd Q



$\sin\theta = -\frac{\sqrt{2}}{2}$ $\csc\theta = -\sqrt{2}$

$\cos\theta = -\frac{\sqrt{2}}{2}$ $\sec\theta = -\sqrt{2}$

$\tan\theta = 1$ $\cot\theta = 1$

43. $\sec 120° = -2$

44. $\sin 315° = -\frac{\sqrt{2}}{2}$

45. $\cos\frac{11\pi}{3} = \cos\frac{5\pi}{3} = \frac{1}{2}$

46. $\tan\left(-\frac{5\pi}{4}\right) = \tan\frac{3\pi}{4} = -1$

47. $\csc 390° = \csc 30°$ $\sin 30° = \frac{1}{2}$

$\csc 30° = 2$

48. $\cot 510° = \cot 150° = -\sqrt{3}$

$\frac{360}{150}$

50. ~~$\sec\frac{3\pi}{2}$~~ $\cos\frac{3\pi}{2} = 0$,

Undefined

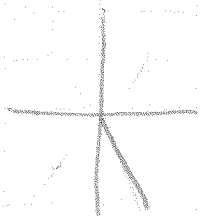
51. $\cot\left(-\frac{5\pi}{6}\right)$ $\sin\frac{7\pi}{6} = -\frac{1}{2}$ $\cos\frac{7\pi}{6} = -\frac{\sqrt{3}}{2}$

$-\frac{\sqrt{3}}{2} \cdot -\frac{2}{1}$ $\cot\left(-\frac{5\pi}{6}\right) = \sqrt{3}$

52. $\csc\frac{17\pi}{6} = \csc\frac{5\pi}{6}$ $\sin 30° = \frac{1}{2}$

$\csc\frac{5\pi}{6} = 2$

53. $\tan\frac{5\pi}{3} = -\sqrt{3}$



54. $\sec\frac{7\pi}{6}$ $\cos\frac{7\pi}{6} = -\frac{\sqrt{3}}{2}$ $\sin\frac{7\pi}{6} = -\frac{1}{2}$

$\sec\frac{7\pi}{6} = -\frac{2\sqrt{3}}{3}$

55. $\sin\left(-\frac{5\pi}{3}\right) = \frac{\sqrt{3}}{2}$

104. B 105. $\frac{2}{3}$ rev/s $\frac{2}{3} \cdot 2\pi = \frac{4\pi}{3}$ J

106.