4.4 Day 1 p. 318 # 11-14, 30, 33, 39, 42, 45, 48, 51, 54

(11) $\sin\theta < 0$ & $\cos\theta < 0$ → III

III, IV II, III

(12) $\sin\theta > 0$ → I

I, II I, IV

(13) $\sin\theta > 0$ & $\tan\theta < 0$ → II

I, II II, IV

(14) $\sec\theta > 0$ ($\cos$) & $\cot < 0$ ($-\tan$) → IV

I, IV II, IV

(30) $\csc\frac{3\pi}{2}$

$\sin\frac{3\pi}{2} = -1$ ∴ $\csc\frac{3\pi}{2} = -1$

(33) $\sin\frac{\pi}{2} = 1$

(39) $\theta = -245°$

$65° = \theta'$

(42) $\theta = \frac{7\pi}{4}$ $\frac{45}{180}\pi$ $= 315°$

$\frac{7\pi}{4}$ $\frac{\pi}{4}$ θ' $45°$

(45) $225°$

$\sin(225°) = -\frac{\sqrt{2}}{2}$

$\cos 225° = -\frac{\sqrt{2}}{2}$

$\tan 225° = 1$

(48) $-405°$

$\frac{45}{-360}$

$\sin(-405°) = -\frac{\sqrt{2}}{2}$

$\cos(-405°) = \frac{\sqrt{2}}{2}$

$\tan(-405°) = -1$

(51) $\frac{4\pi}{3}$ $\frac{180}{\pi}$ $= 240°$

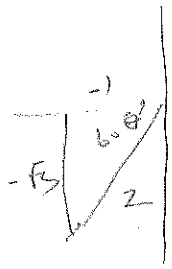
60

240
−180
60

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

$\cos \frac{4\pi}{3} = -\frac{1}{2}$

$\tan \frac{4\pi}{3} = \sqrt{3}$



(54) $-\frac{\pi}{2} = -90°$

$\sin -\frac{\pi}{2} = -1$

$\cos -\frac{\pi}{2} = 0$

$\tan -\frac{\pi}{2} = \frac{\sin}{\cos} = \frac{-1}{0}$ undefined