

Section 4.6

~~Inverse~~ Trig graphs

Reciprical

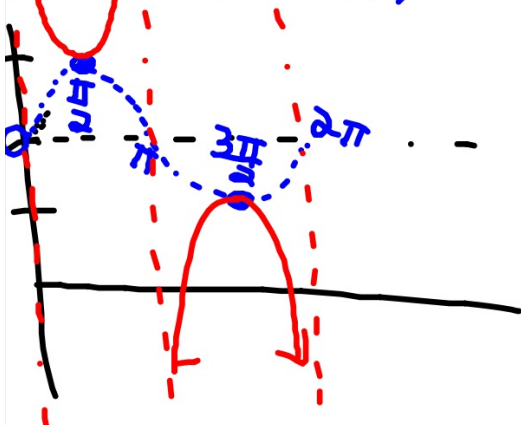
CSC graphs

1.) $y = \csc \Theta + 2$

Amp: 1 Chgs: $\cup \cap$

Per: 2π Asm: $0, \pi, 2\pi$

Pts: $(\frac{\pi}{2}, 3)(\frac{3\pi}{2}, 1)$



2.) $y = 3 \csc (\Theta - 90^\circ)$

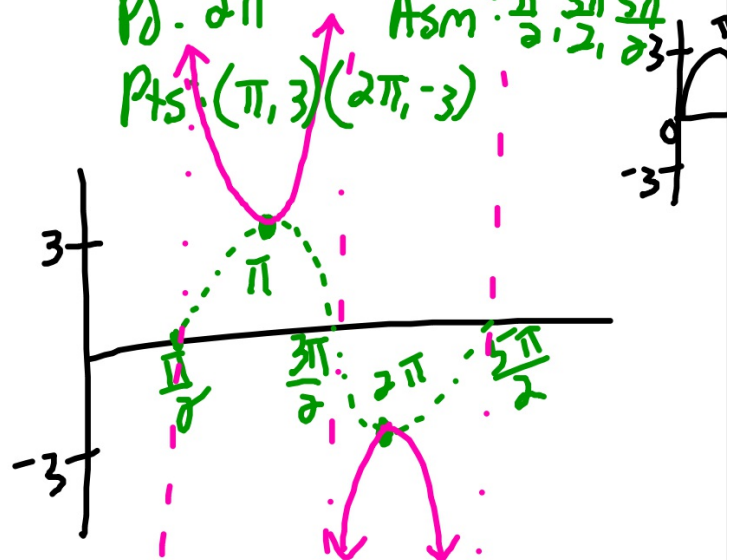
Amp: 3

Chgs: $R \pi/2$

Per: 2π

Asm: $\frac{\pi}{2}, \frac{3\pi}{2}, \frac{5\pi}{2}$

Pts: $(\pi, 3)(2\pi, -3)$



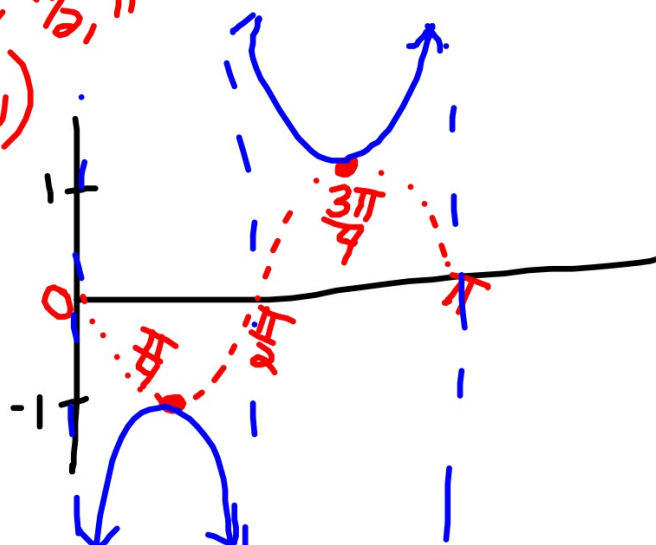
CSC graphs

3.) $y = -\csc 2\theta$

Amp: 1 Chgs: Refl. x-axis

Per: π Asm: $0, \pi/2, \pi$

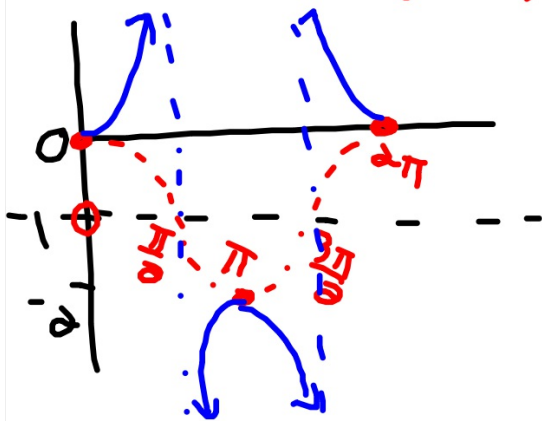
Pts: $(\pi/4, -1)$ $(3\pi/4, 1)$



SEC graphs

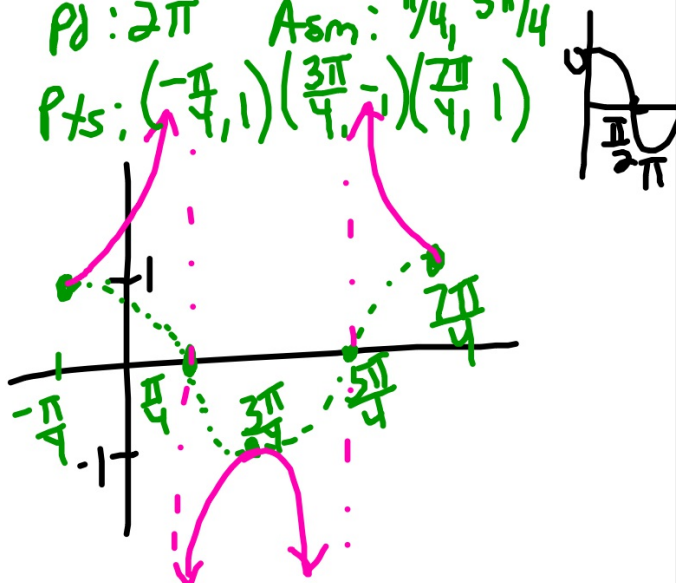
1.) $y = \sec \Theta - 1$

Amp: 1 Chgs: D1
 P₀: 2π A_{am}: $\frac{\pi}{2}, \frac{3\pi}{2}$
 P_{ts}: $(0,0)(\pi,-2)(2\pi,0)$



2.) $y = \sec (\Theta + 45^\circ)$

Amp: 1 Chgs: $\angle \pi/4$
 P₀: 2π A_{am}: $\pi/4, 5\pi/4$
 P_{ts}: $(-\pi/4, 1)(3\pi/4, -1)(7\pi/4, 1)$



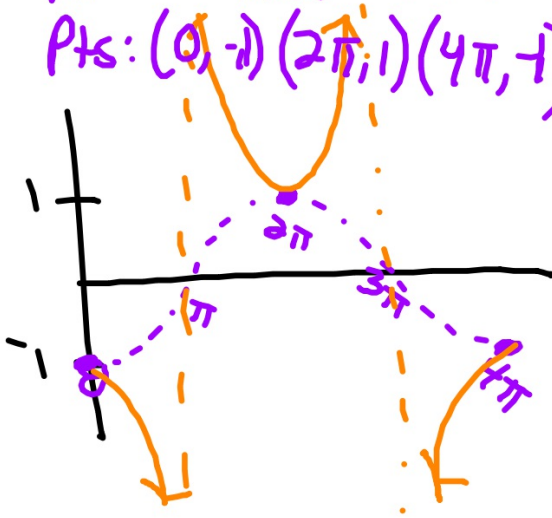
SEC graphs

3.) $y = -\sec \frac{1}{2} \Theta$

Amp: 1 Chgs: Refl. x-axis

Per: 4π Asym: $\pi, 3\pi$

Pts: $(0, -1)$ $(2\pi, 1)$ $(4\pi, -1)$



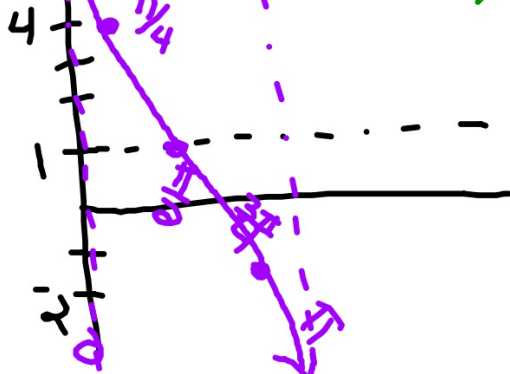
COT graphs

1.) $y = 3\cot\theta + 1$

Amp: none Chys: vert. stretch

$Pd: \pi$ Asm: $0, \pi$

Pts: $(\frac{\pi}{4}, 4)$ $(\frac{\pi}{2}, 1)$ $(\frac{3\pi}{4}, -2)$



2.) $y = \cot(\theta - \pi)$

Amp: none Chys: $R\pi$

$Pd: \pi$ Asm: $\pi, 2\pi$

Pts: $(\frac{5\pi}{4}, 1)$ $(\frac{3\pi}{2}, 0)$ $(\frac{7\pi}{4}, -1)$



COT graphs

3.) $y = -\cot\theta$

Homework

- Wkst 4.5 # 26-30, 41-50