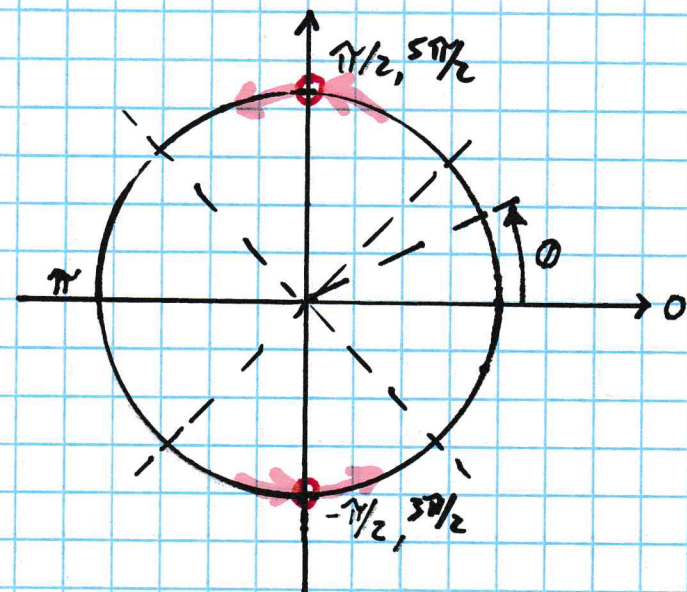


$$\sec \theta = \frac{1}{x} = \frac{1}{\cos \theta}$$

$$\text{Domain: } \theta \neq \frac{2n+1}{2}\pi = \dots, -\frac{\pi}{2}, \frac{\pi}{2}, \frac{3\pi}{2}, \frac{5\pi}{2}, \dots$$

| | | | | | | | | | |
|---------------|------------------|------------------|-----------|-----------------|-----------------|------------------|----------|------------------|------------------|
| θ | $-\frac{\pi}{2}$ | $-\frac{\pi}{4}$ | 0 | $\frac{\pi}{4}$ | $\frac{\pi}{2}$ | $\frac{3\pi}{4}$ | π | $\frac{5\pi}{4}$ | $\frac{3\pi}{2}$ |
| $\sec \theta$ | DNE | +1.4 | 1 | +1.4 | DNE | -1.4 | -1 | -1.4 | DNE |
| trend | ∞ | \ominus | \ominus | \oplus | \oplus | ∞ | \oplus | \oplus | ∞ |



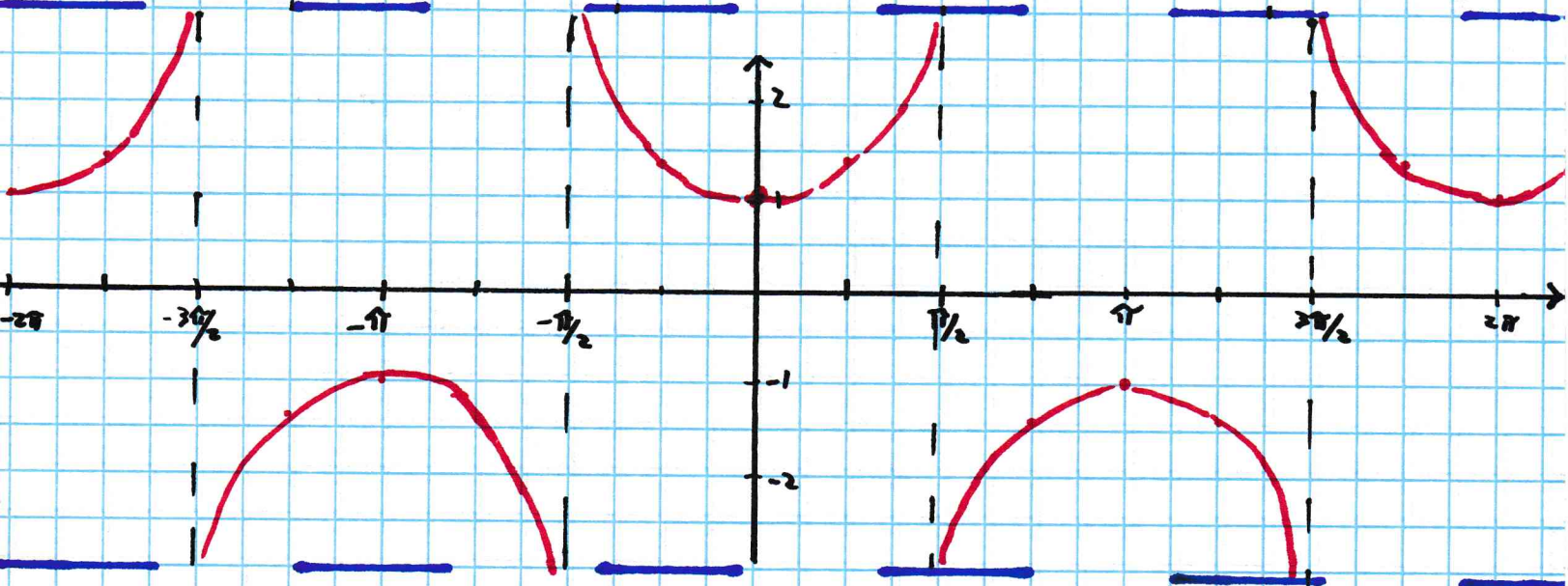
$$f(x) = \sec(x)$$

$$\text{Domain: } x \neq \frac{2n+1}{2}\pi$$

$$\text{Range: } (-\infty, -1] \cup [1, \infty)$$

$$\text{Period: } 2\pi$$

$$\text{Asymptotes: } x = \frac{2n+1}{2}\pi$$



$$f(x) = \sec(x)$$