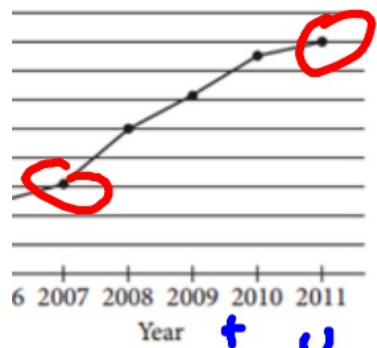




$\frac{3}{8} = 0.375$

From the graph above, the number of portable media sold in 2007 is what fraction of the number sold in 2011?

.	.	.	.
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Section 4.5

- Graph

$\tan x$

$\cot x$

$\sec x$

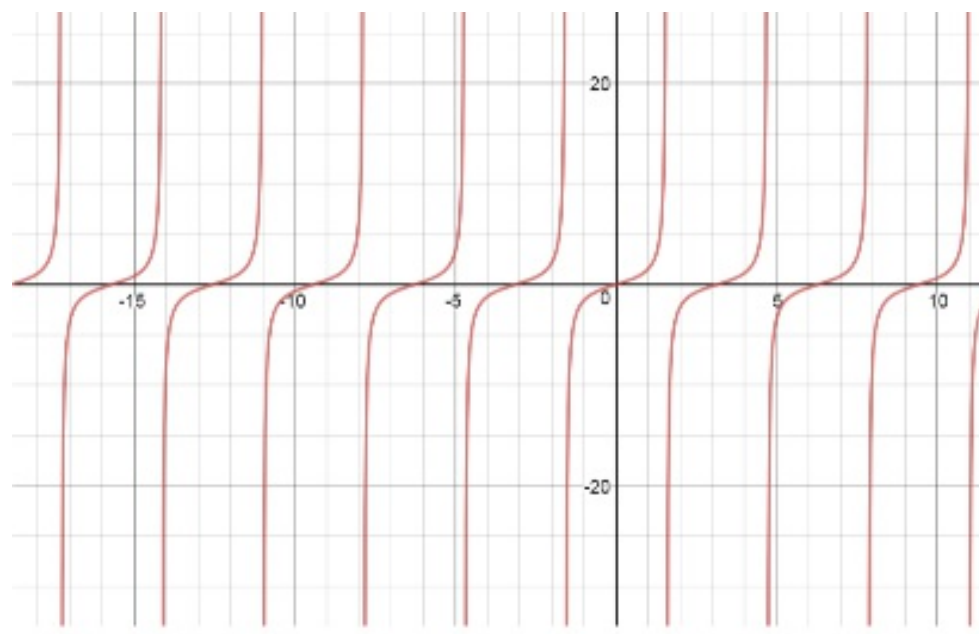
$\csc x$

} reset
after each
graph

then graph each one in your
notebook

page 366 # 13-16 (only match).

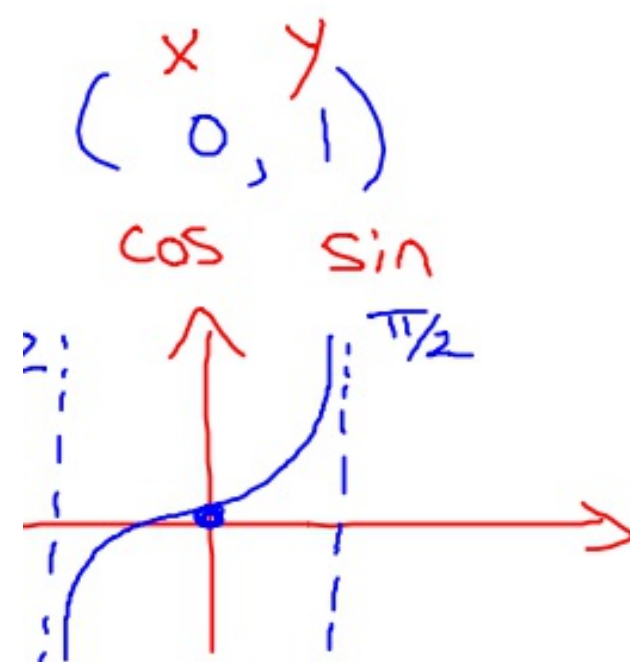
- match without graphing.
- then graph to check your answers.



through the origin (
 $\tan 0 = \frac{\sin 0}{\cos 0} = \frac{0}{1} =$
 $(1,0)$

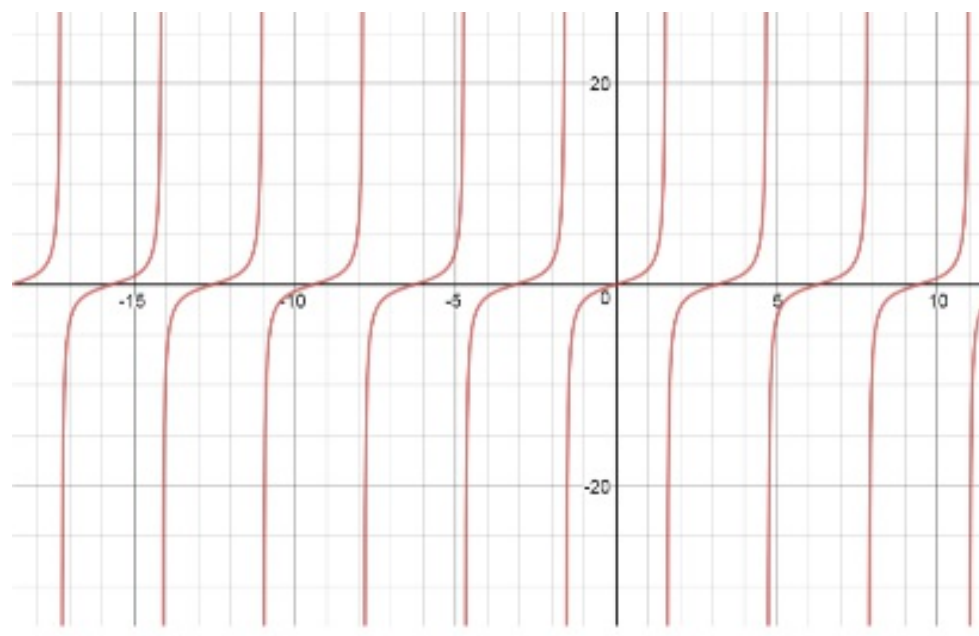
$\therefore$ (repeats in the
 as V.A.

$$\tan \frac{\pi}{2} = \frac{\sin}{\cos} =$$



$$\frac{\pi}{2}$$

$$= 1$$

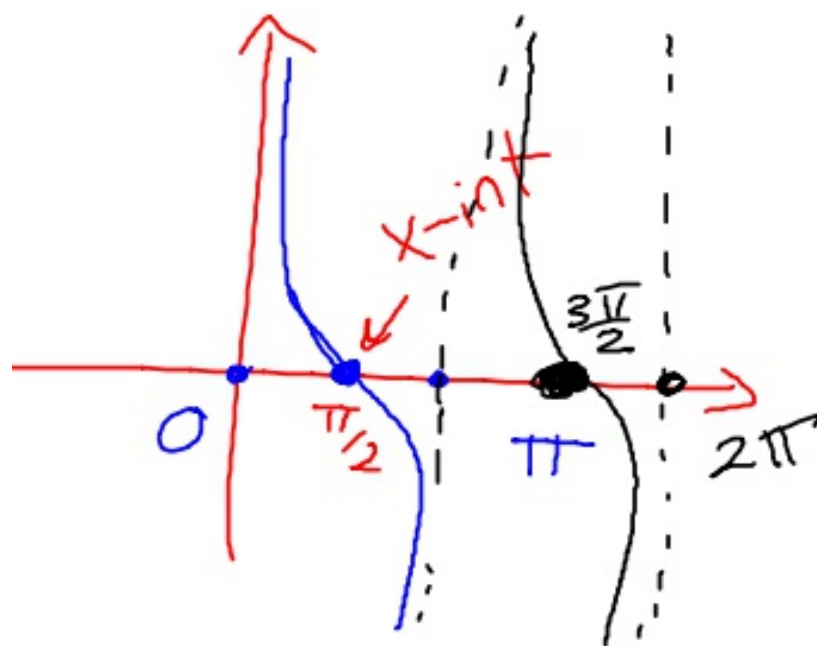




pass through the 0

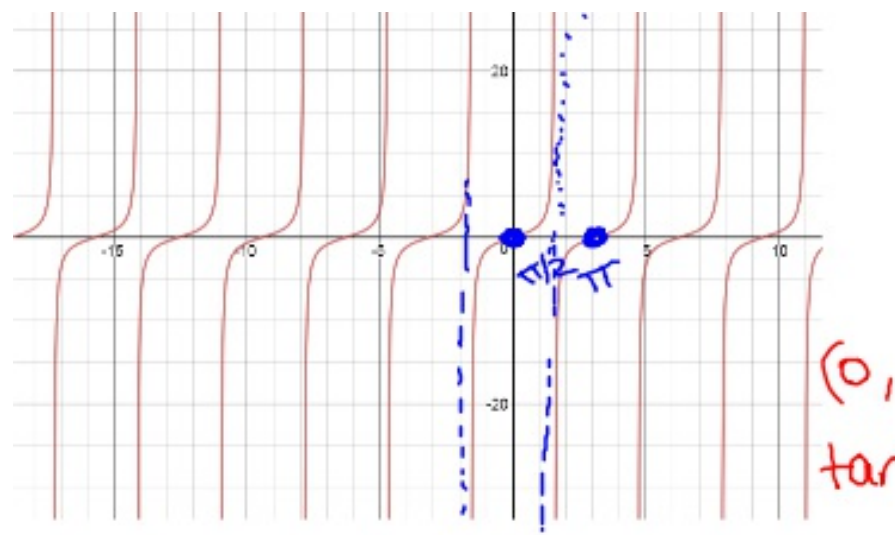
$$\frac{1}{\tan} = \frac{\cos}{\sin} = \frac{1}{0}$$

$\pi (-$



$\frac{\pi}{2}$

$\frac{3\pi}{2}$



$y = \tan x$
passes through the origin

$$\tan 0 = \frac{\sin}{\cos} = \frac{0}{1} = 0$$

$$0^\circ \begin{pmatrix} x & y \\ \cos & \sin \end{pmatrix} \begin{pmatrix} 1 & 0 \end{pmatrix}$$

periodic $\rightarrow$ repeats follow same pattern.

$(-1, 0)$ $\tan \pi = \frac{0}{-1}$
the graph has V.A. $(\pi, 0)$

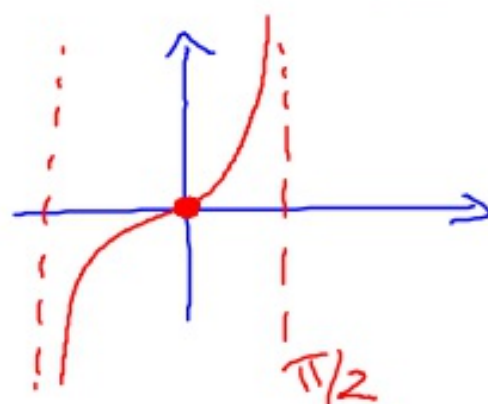
$(0, 1)$ $\tan = \frac{1}{0}$ v
V.A at $\frac{\pi}{2}$

$$\frac{\pi}{2} (0, -1)$$

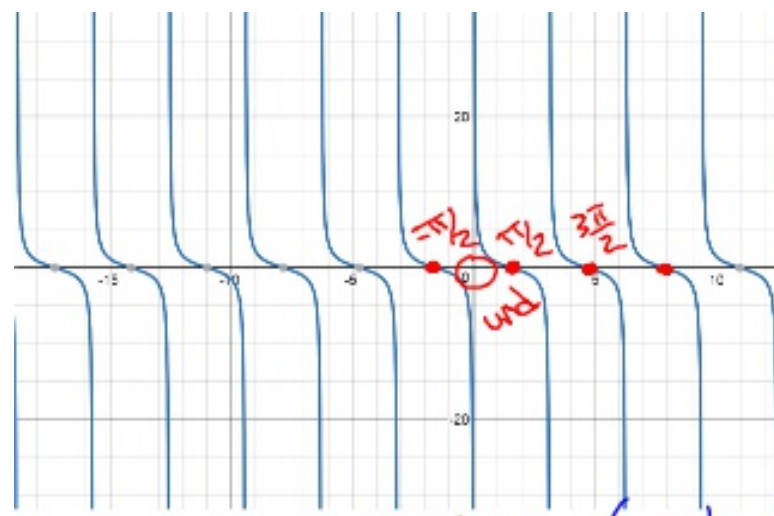
$$\frac{3\pi}{2}$$

$$\tan \frac{3\pi}{2} = -\frac{1}{0} \text{ und}$$

V.A



1 cycle
of tan



$$y = \cot x \quad (\cot = \frac{1}{\tan})$$

Flipped cycle of tan.

does not pass through + origin (0,0)

$$\cot 0^\circ = \frac{\cos}{\sin} = \frac{1}{0} \text{ und.}$$

0)

$$x\text{-int} \quad \frac{\pi}{2} \quad \left(\frac{\pi}{2}, 0\right)$$

$$\cot \frac{\pi}{2} = \frac{0}{1} = 0 \quad x\text{-int}$$

$$(0, 1)$$

$$\frac{\pi}{2} \text{ (or } \frac{3\pi}{2}) \quad (0, -1)$$

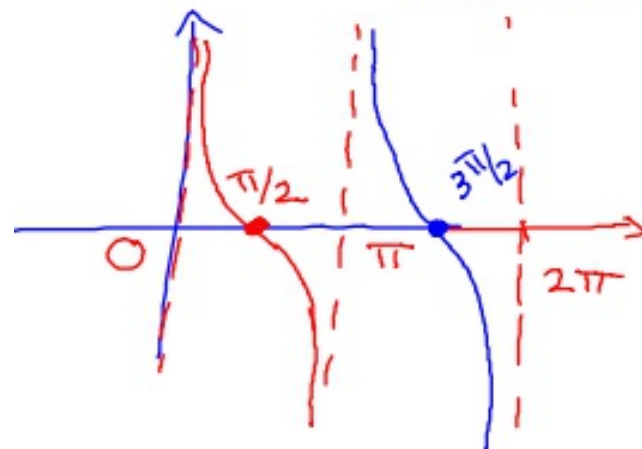
$$\cot\left(-\frac{\pi}{2}\right) = \frac{0}{-1} = 0$$

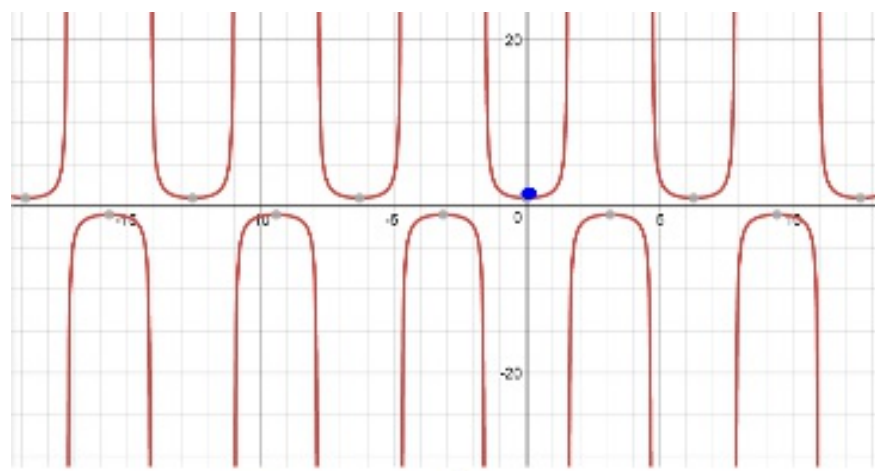
$$\text{I.A at } \pi \quad \cot \pi = -\frac{1}{0}$$

$$(-1, 0)$$

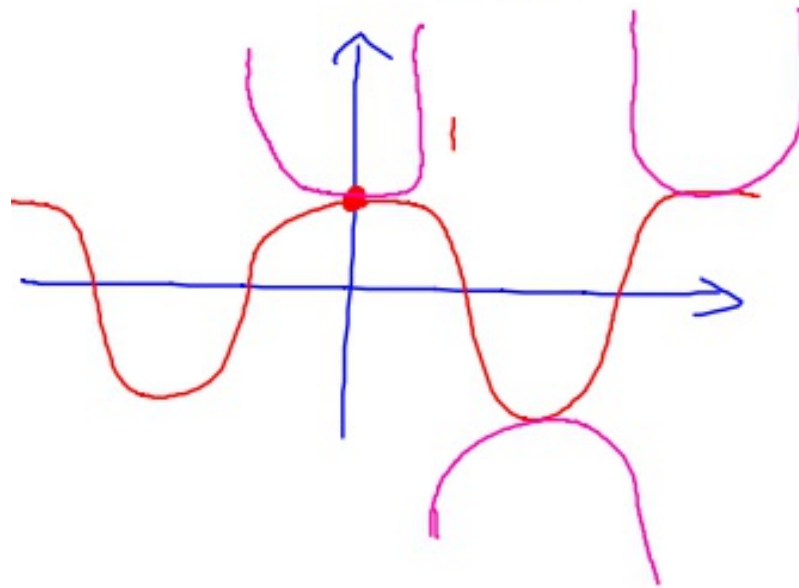
$$\text{V.A at } \pi$$

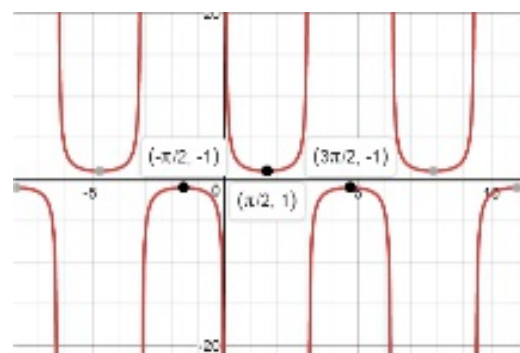
$$\cot 0 = \frac{1}{0}$$

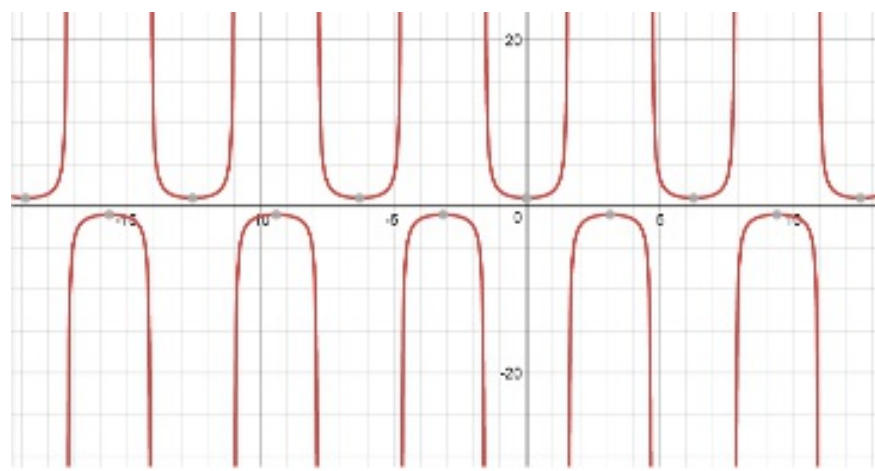




$$\sec = \frac{1}{\cos}$$







at

- (No solutions)
- pattern

