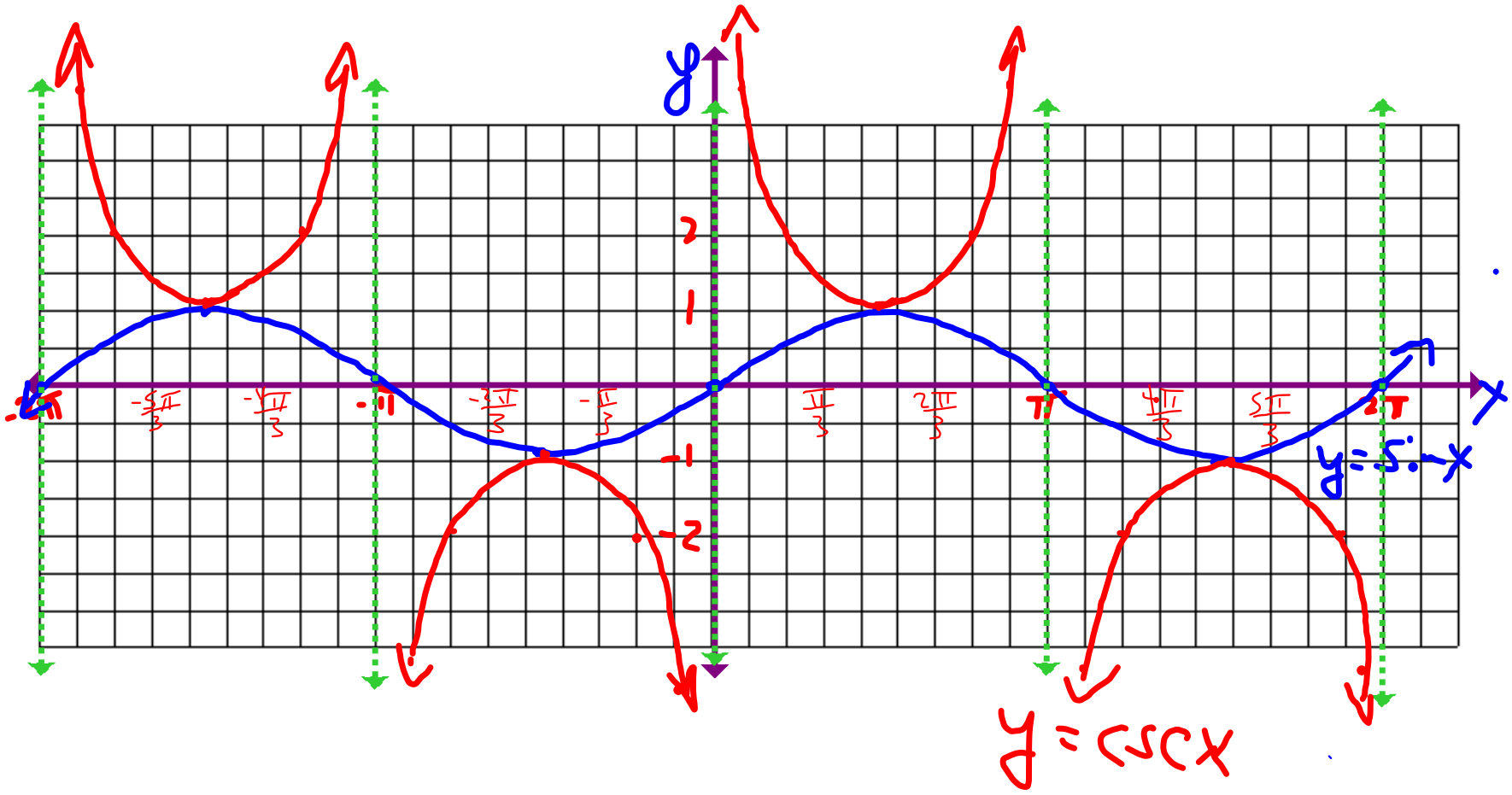
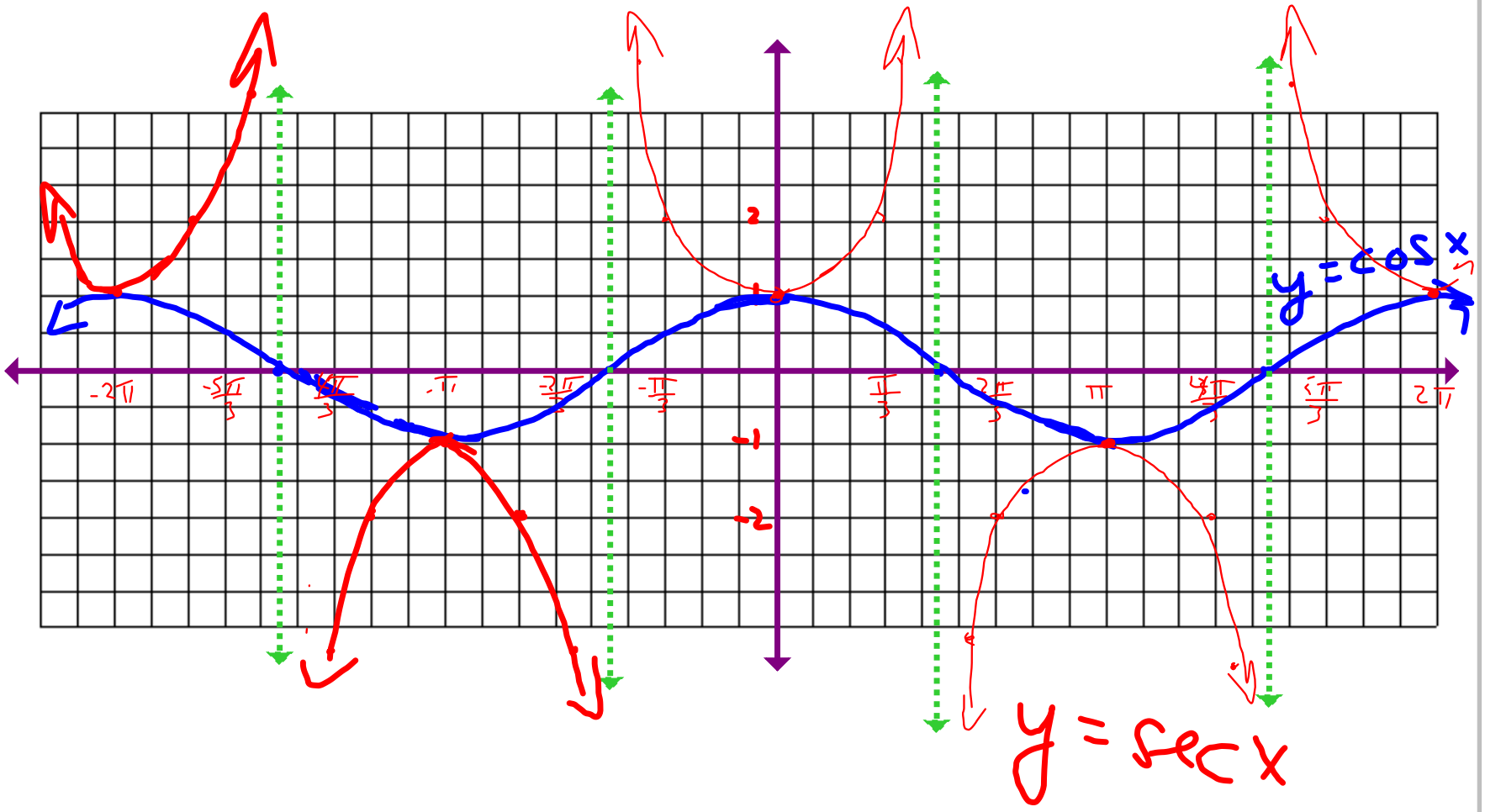
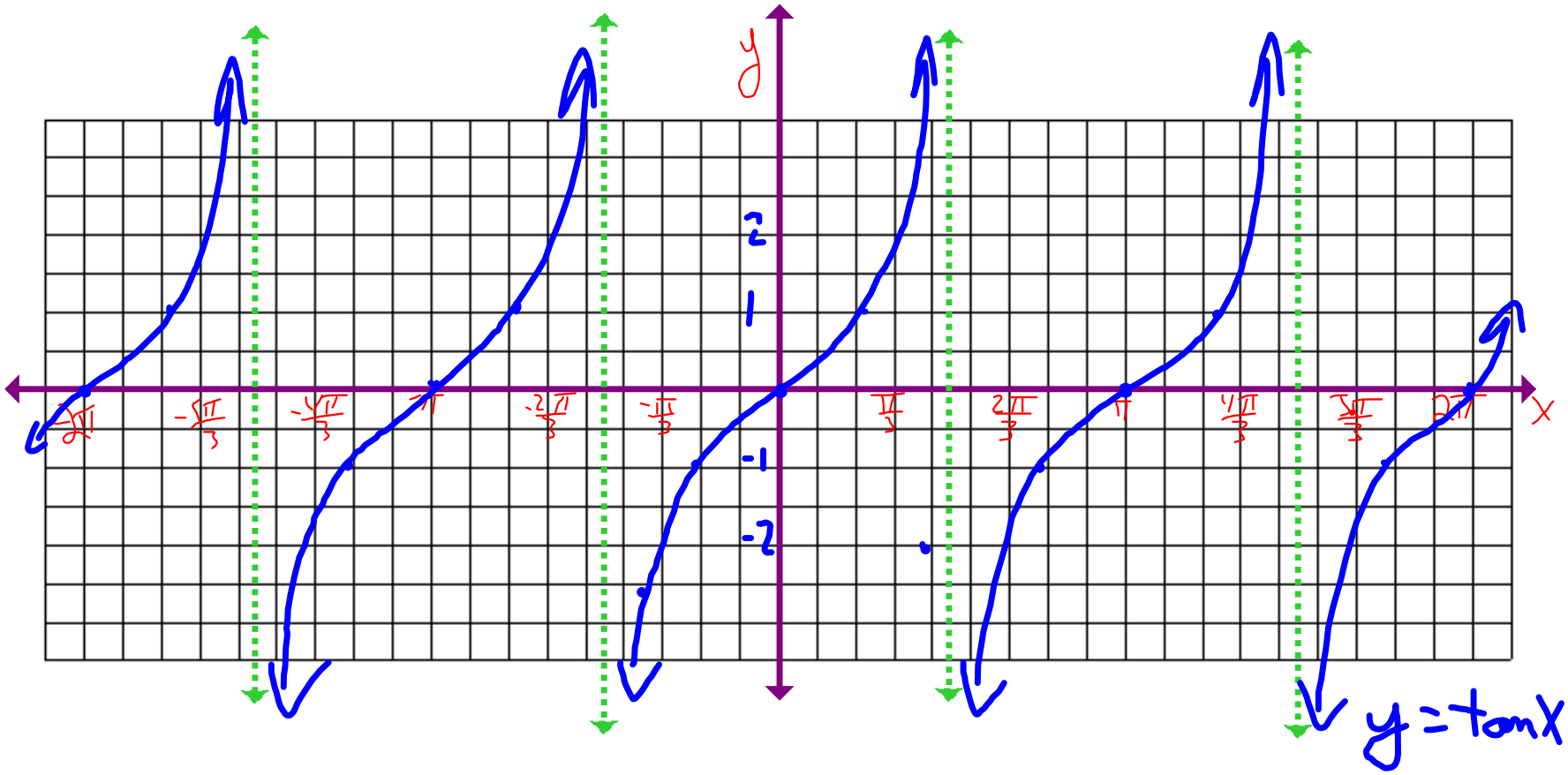


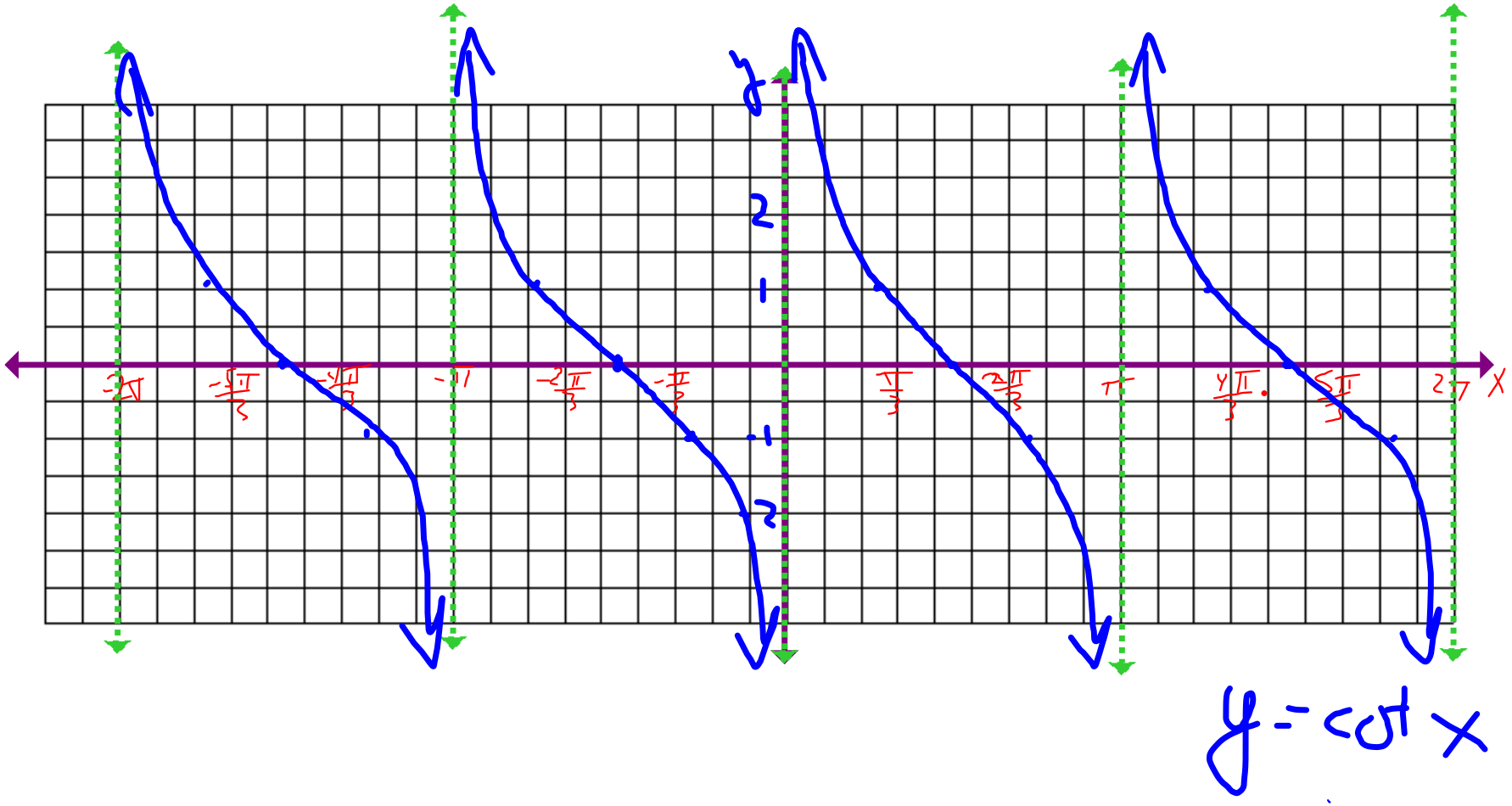
$y = \csc x$

$= \frac{1}{\sin x}$


2
-1
-2
-2π
$-\frac{5\pi}{3}$
$-\frac{4\pi}{3}$
$-\pi$
$-\frac{2\pi}{3}$
$-\frac{\pi}{3}$
$\frac{\pi}{3}$
$\frac{2\pi}{3}$
π
$\frac{4\pi}{3}$
$\frac{5\pi}{3}$
2π
$y = \cos x$
$y = \sec x$



Title: Nov 17-2:16 PM (3 of 5)

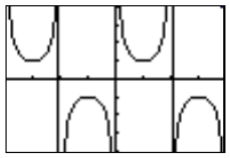
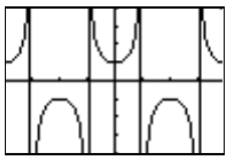
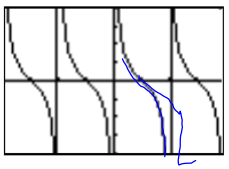


$y = \cot x$

$\therefore$

KEY CONCEPTS

Characteristics of the Reciprocal Trigonometric Functions

	y = cscθ	y = secθ	y = cotθ
Domain	$\{x \mid x \in \mathbb{R}, x \neq k\pi, k \in I\}$	$\{x \mid x \in \mathbb{R}, x \neq \frac{k\pi}{2}, k \in I\}$	$\{x \mid x \neq \pi k, k \in I, x \in \mathbb{R}\}$
Range	$\{y \mid y \geq 1, y \leq -1, y \in \mathbb{R}\}$	$\{y \mid y \geq 1, y \leq -1, y \in \mathbb{R}\}$	$\{y \mid y \in \mathbb{R}\}$
Period	2π	2π	π
x-intercept	NONE	NONE	$\frac{\pi}{2} + k\pi, k \in I$
y-intercept	NONE	1	None
Positive Turning Point	$y = 1$ $x = \frac{\pi}{2} + 2k\pi, k \in I$	$y = 1$ $x = 2k\pi, k \in I$	NONE
Negative Turning Point	$y = -1$ $x = -\frac{\pi}{2} + 2k\pi, k \in I$	$y = -1$ $x = -\pi + 2k\pi$ $k \in I$	NONE
Asymptotes	$x = k\pi, k \in I$	$x = \frac{k\pi}{2}, k \in I$	$x = k\pi, k \in I$
Sketch of Graph			

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