Section 4.5: Graphs of Tan/Cot/Csc/Sec

Tan & the reciprocals all have undefined values, so all their graphs will have asymptotes!

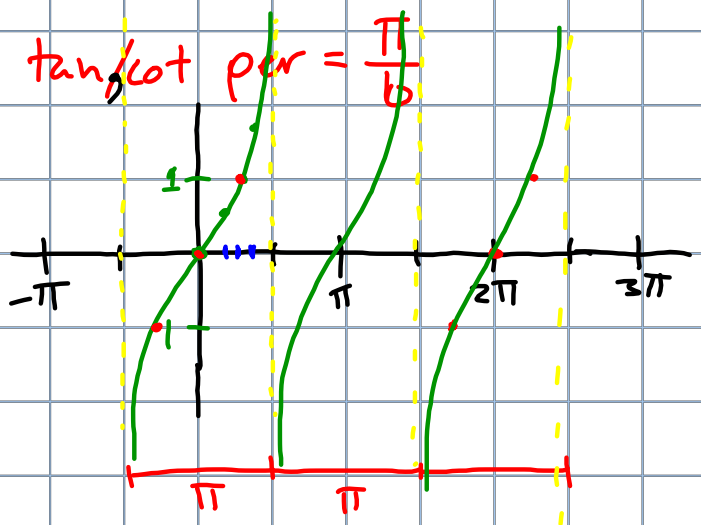
$y = \tan x$

per $= \pi$

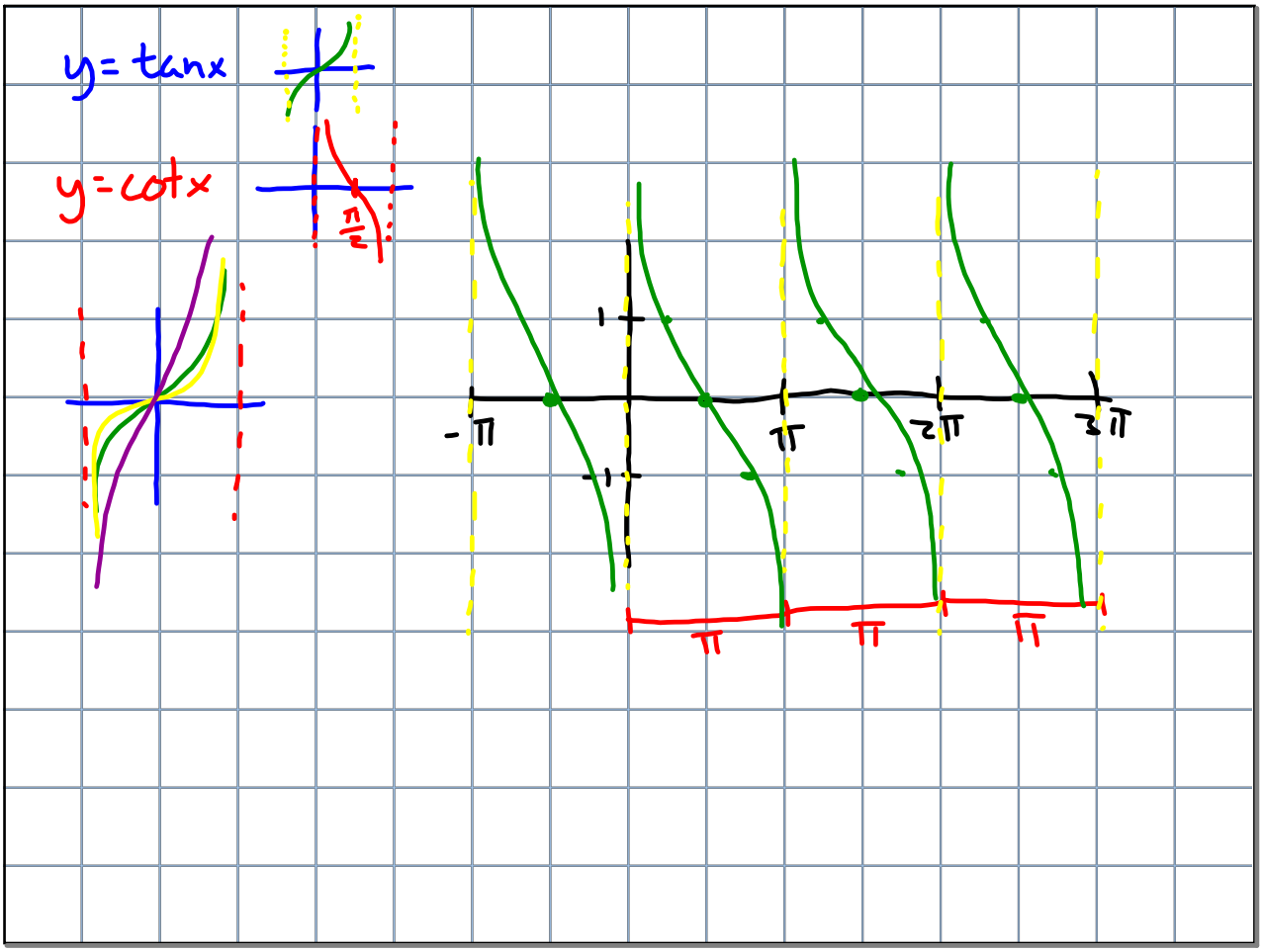
amp $= 1$

x	y
0	0
$\pi/6$	$\sqrt{3}/3 = 1.7/3 = .55$
$\pi/4$	1
$\pi/3$	$\sqrt{3} = 1.7$
$\pi/2$	und

tan/cot per $= \frac{\pi}{b}$



$\frac{0}{1} \to \frac{1}{0} = u$

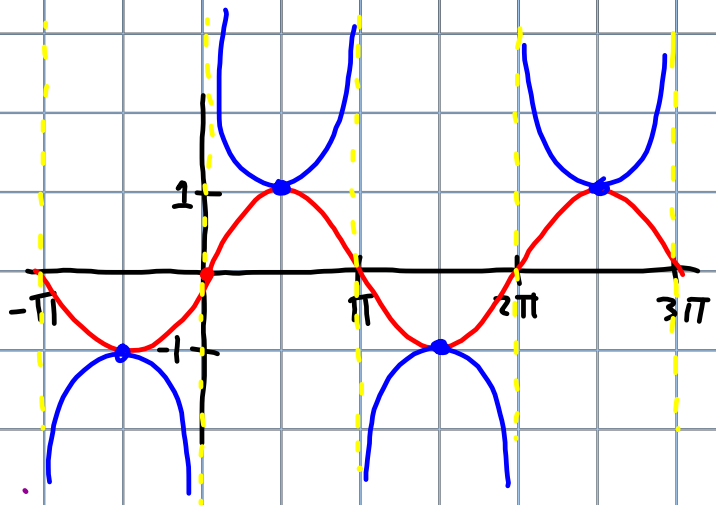


$y = \csc x$

$\downarrow$

$1/\sin$

$1 = \frac{1}{1} \to 1$

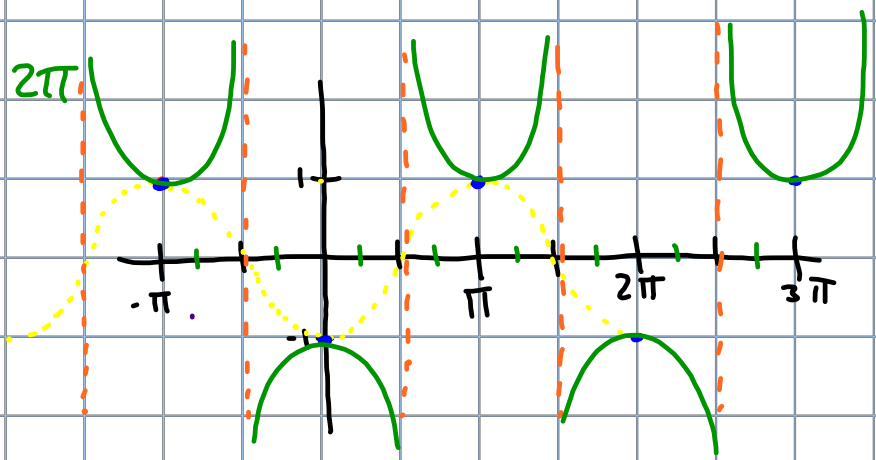


p. 277; # 1-15 odd

#11 $y = \sec(x + \pi)$

$1/\cos$

phase shift $= -\frac{c}{|b|} = -\frac{\pi}{1} = -\pi$ ← left

amp = 1

per $= \frac{2\pi}{1} = 2\pi$