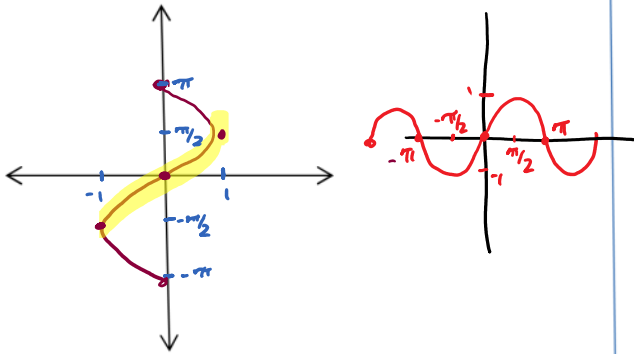


# 4.7

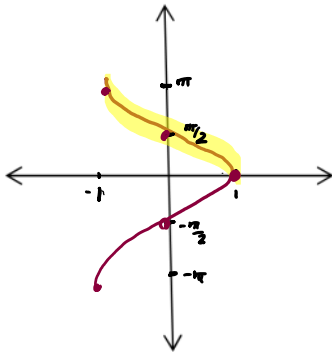
Thursday, March 7, 2019 8:12 AM

Part A: Graph the following relations:

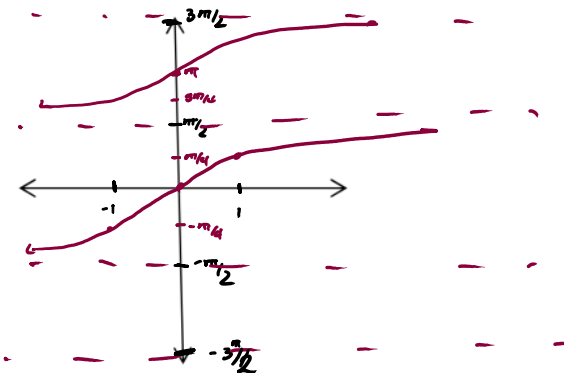
1.  $y = \sin^{-1} x$



2.  $y = \cos^{-1} x$

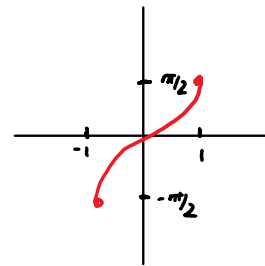


3.  $y = \tan^{-1} x$

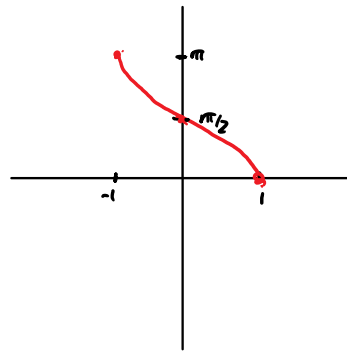


Part B: Now consider (1-6) as functions, state a possible domain and range for:

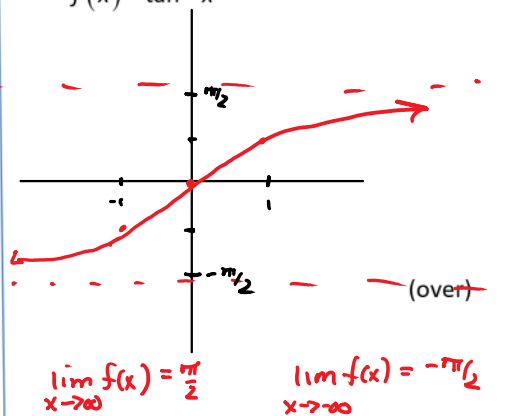
$f(x) = \sin^{-1} x$



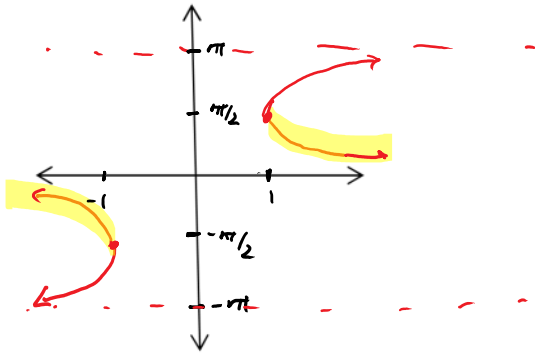
$f(x) = \cos^{-1} x$



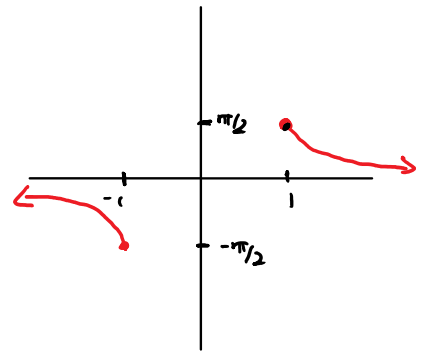
$f(x) = \tan^{-1} x$



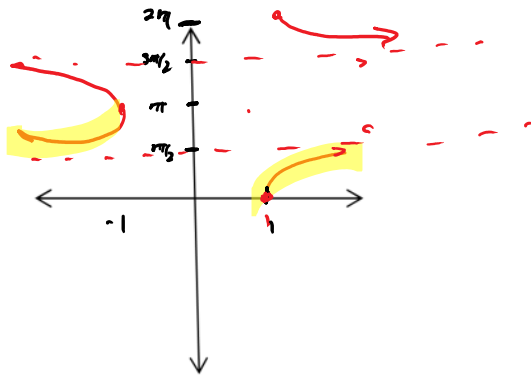
4.  $y = \csc^{-1} x$



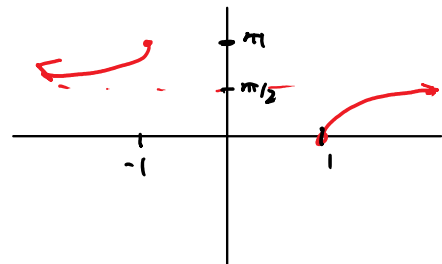
$f(x) = \csc^{-1} x$



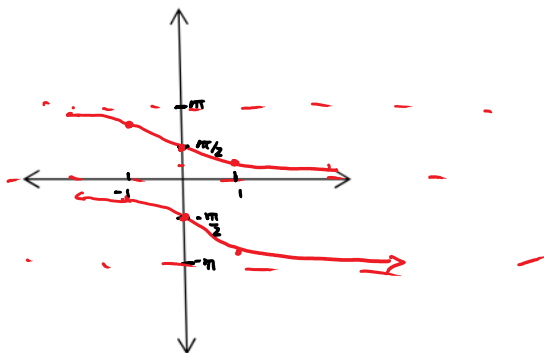
5.  $y = \sec^{-1} x$



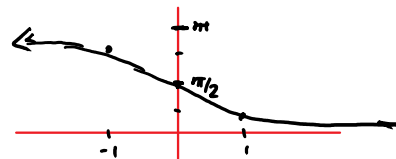
$f(x) = \sec^{-1} x$



6.  $y = \cot^{-1} x$



$f(x) = \cot^{-1} x$



$\lim_{x \rightarrow \infty} f(x) = 0$

$\lim_{x \rightarrow -\infty} f(x) = \pi$