Sec 6.5 Graphing reciprocal trig functions

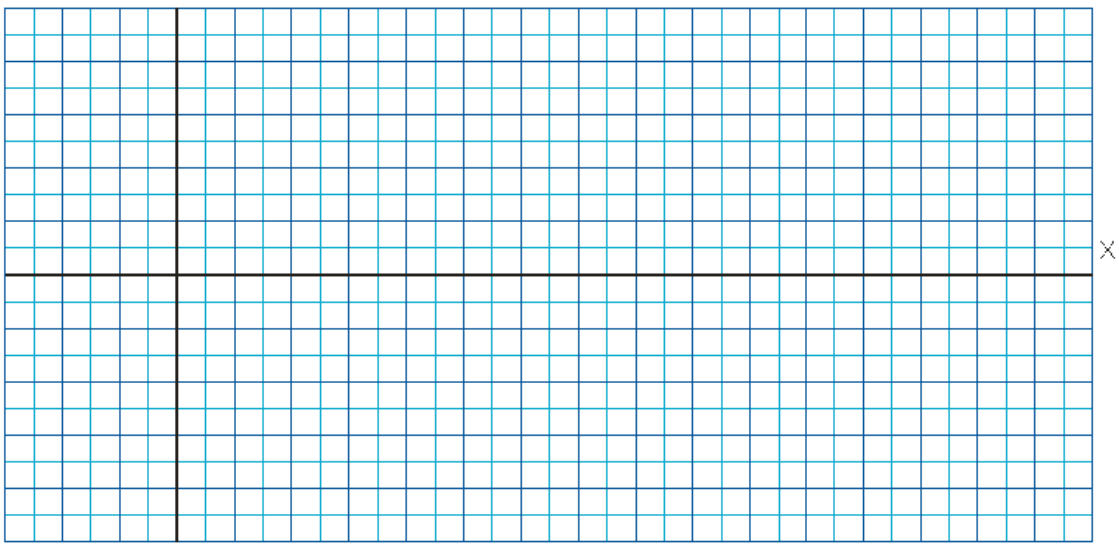
Complete the table, and graph the following:

$y = \sin(x)$

X	y
0	
15	
30	
45	
60	
75	
90	
105	
120	

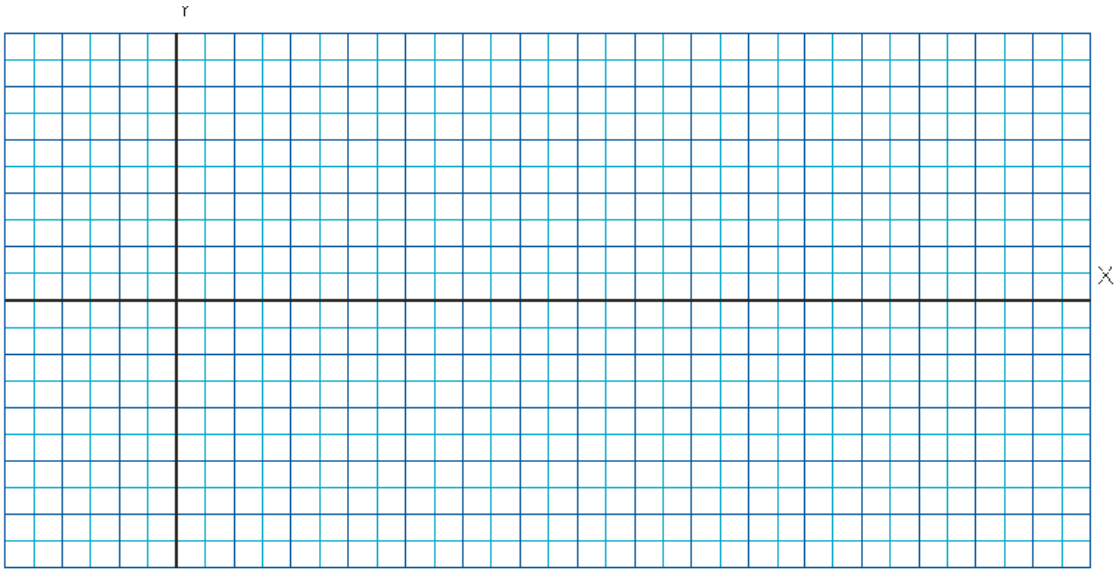
$y = \csc x$ or $y = \frac{1}{\sin x}$

X	y
0	
15	
30	
45	
60	
75	
90	
105	
120	

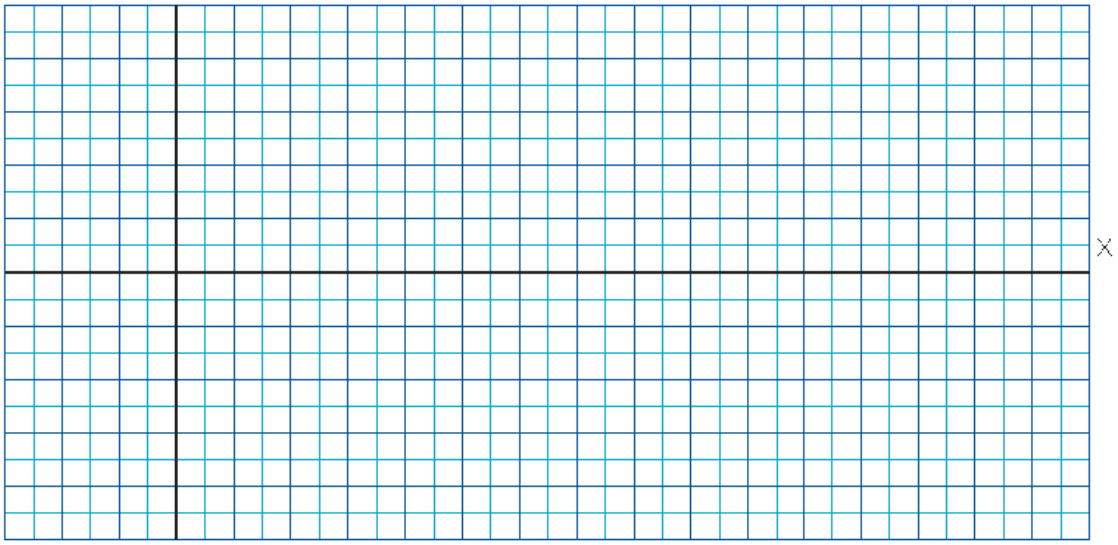


$y = \sec x$

Watch for: asymptotes, end behaviours, key points



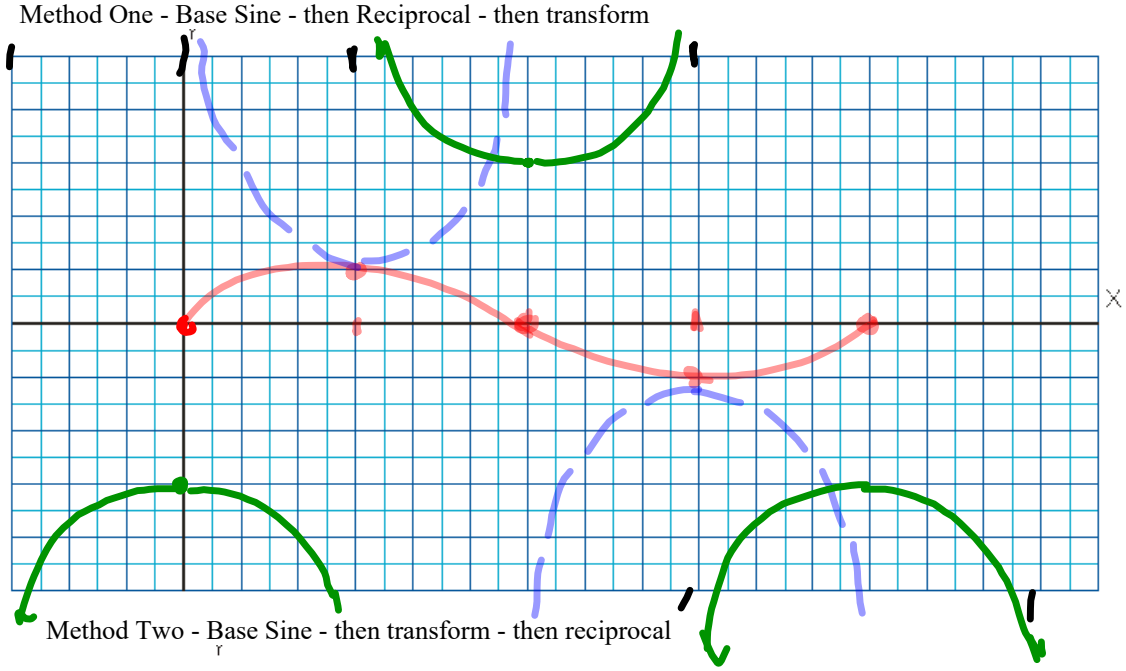
$y = \cot x$



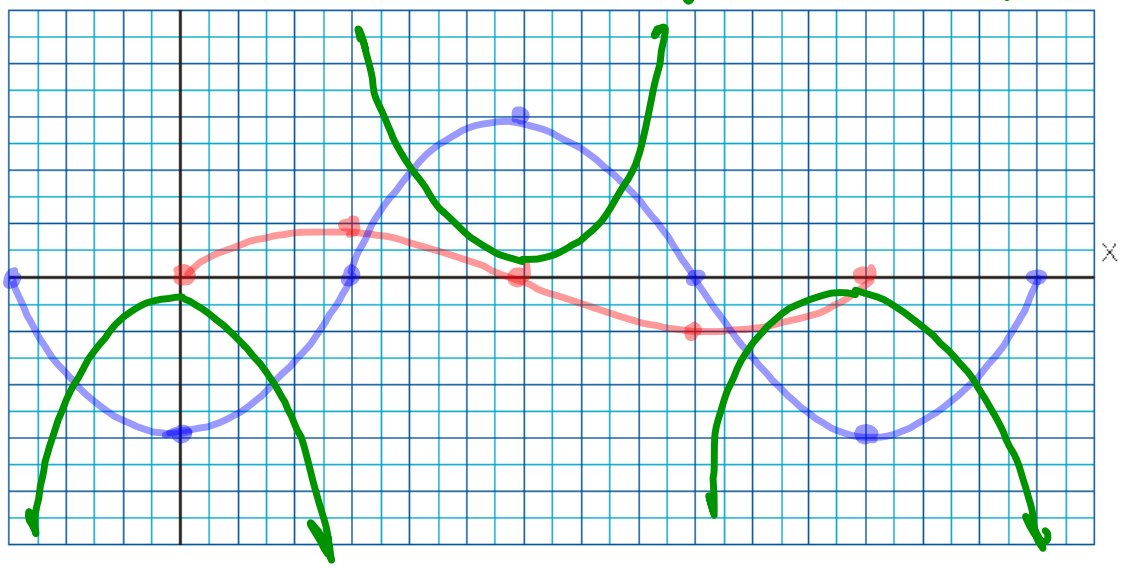
Graph - Does Order matter? Yes it does!

$$y = 3 \cdot \csc\left(x - \frac{\pi}{2}\right)$$

Method One - Base Sine - then Reciprocal - then transform



Method Two - Base Sine - then transform - then reciprocal



Notice:

These graphs can be transformed using the same key ideas as regular trig functions.

Homework
p353 #7