## Section 7.5

1 $\tan 100^\circ = \tan(100^\circ)$

$= -5.6713$

2 $\cot 276^\circ = \cot(96^\circ)$

$= -0.1051$

3 $\csc 5 = \frac{1}{\sin 5}$

$= -1.0428$

4 $\sec 49^\circ = \frac{1}{\cos 49^\circ}$

$= 1.5243$

5 $\tan 820 = \tan(180^\circ 4 + \frac{5}{9} 180^\circ)$

$= \tan 100$

6 $\sec 290^\circ = \frac{1}{\cos(290)}$

$= \frac{1}{\cos(290^\circ)}$

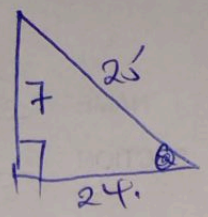
7 $\cot 185 = \cot(185 - 180)$

$= \cot(5^\circ)$

8 $\csc \frac{2\pi}{3} = \frac{1}{\sin\left(\frac{2\pi}{3}\right)}$.

# Section 7.5

9 $\sin x = \frac{-7}{25}$




$25^2 - 7^2 = 576$ $\sqrt{576}$.

$= 24.$

$\cos x = \frac{-24}{25}$, $\tan x = \frac{-7}{24}$, $\csc = \frac{1}{\sin} = \frac{-25}{7}$,

$\sec x = \frac{1}{\cos} = \frac{-25}{24}$

10 $\sec x = \frac{1}{\cos} = \cos \frac{-1}{\sqrt{2}}$.


$\tan x = \frac{1}{1}$, $\sin x = \frac{-1}{\sqrt{2}}$, $\csc = \frac{-\sqrt{2}}{1}$, $\cos x = \frac{-1}{\sqrt{2}}$

11 $\csc 300 = \frac{1}{\sin 300}$ $\sin 300 = \cos(90 - 300)$

$= \frac{1}{\cos(-210)} = -\frac{2\sqrt{3}}{3}$

12 $\sec -225 = \frac{1}{\cos(-225)} = -\sqrt{2}$.

13 $\cot 180^\circ =$ undefined

14 $\tan 240 = \tan 60^\circ$

$\tan 60^\circ = \sqrt{3}$.