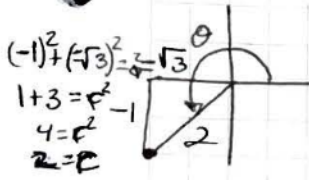


Sec 4.4 Trig. Func for any θ pg 320 # 3, 5, 31-35, 62-64, 97

Solcah Toa

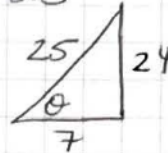
#3) $(-\sqrt{3}, -1)$



$\sin \theta = -\frac{1}{2}$ $\csc \theta = -2$
 $\cos \theta = -\frac{\sqrt{3}}{2}$ $\sec \theta = -\frac{2\sqrt{3}}{3}$
 $\tan \theta = \frac{1}{\sqrt{3}}$ $\cot \theta = \sqrt{3}$

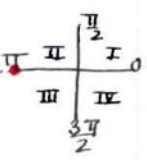
#5) $(7, 24)$

$r = \sqrt{7^2 + 24^2}$
 $r = \sqrt{49 + 576}$
 $r = 25$



$\sin \theta = \frac{24}{25}$ $\csc \theta = \frac{25}{24}$
 $\cos \theta = \frac{7}{25}$ $\sec \theta = \frac{25}{7}$
 $\tan \theta = \frac{24}{7}$ $\cot \theta = \frac{7}{24}$

OR
 $\sqrt{(-1)^2 + (\sqrt{3})^2} = r$
 $\sqrt{1+3} = \sqrt{4} = 2 = r$



#31) $\sec \pi \Rightarrow (-1, 0)$

$r = \sqrt{(-1)^2 + 0^2} = 1$
 $\frac{x}{r} = \frac{-1}{1} = -1$

#32) $\tan \frac{\pi}{2} \Rightarrow (0, 1)$

$\frac{y}{x} = \frac{1}{0} = \text{Undefined}$

~~$r = \sqrt{0^2 + 1^2} = 1$~~

#33) $\cot \frac{\pi}{2} \Rightarrow (0, 1)$

$\frac{x}{y} = \frac{0}{1} = 0$

#34) $\csc \pi \Rightarrow (-1, 0)$ $r = 1$
 $\frac{r}{y} = \frac{1}{0} = \text{Undefined}$

#35) $\sec \theta \Rightarrow (1, 0)$

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

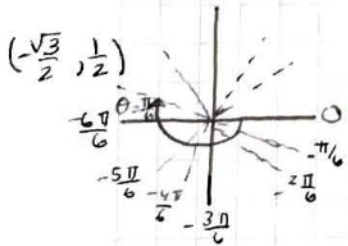
#63) $-\frac{7\pi}{6}$

$\theta' = \frac{\pi}{6}$, Quad. II

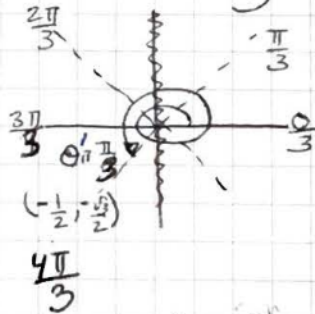
$\sin \frac{\pi}{6} = \frac{1}{2}$

$\cos \frac{\pi}{6} = -\frac{\sqrt{3}}{2}$

$\tan \frac{\pi}{6} = -\frac{\sqrt{3}}{3}$



#62) $\frac{10\pi}{3}$



$\theta' = \frac{\pi}{3}$, Quad. III

$\sin \frac{\pi}{3} = -\frac{\sqrt{3}}{2}$

$\cos \frac{\pi}{3} = -\frac{1}{2}$

$\tan \frac{\pi}{3} = \sqrt{3}$

#97)

Function

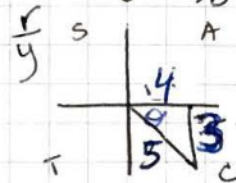
Quadrant

Trig Value

$\sin \theta = -\frac{3}{5}$

IV

$\cos \theta$



$\cos \theta = \frac{4}{5}$

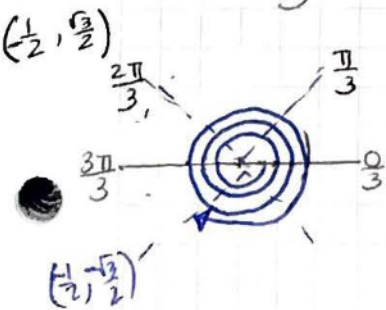
#64) $-\frac{20\pi}{3}$

$\theta' = \frac{\pi}{3}$, Quad. II

$\sin \frac{\pi}{3} = \frac{\sqrt{3}}{2}$

$\cos \frac{\pi}{3} = -\frac{1}{2}$

$\tan \frac{\pi}{3} = \sqrt{3}$



$r^2 = 3^2 + x^2$
 $25 = 9 + x^2$
 $16 = x^2$
 $4 = x$

