FST Trig 2.5 Warm up

For the following problems below:

a) Sketch the reference triangle.

b) Find the reference angle.

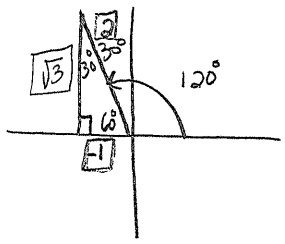
c) Find the exact value.

SOH CAH TOA

$\frac{-3(180)}{4} = -135°$

1) *Tan* 120°

a)

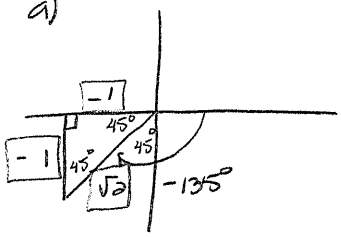


b) 60°

c) $\tan 120° = \frac{\sqrt{3}}{-1} = \boxed{-\sqrt{3}}$

2) *Sin* $\frac{-3\pi}{4}$ = Sin (-135°)

a)

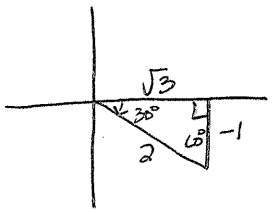


b) 45°

c) $\sin -135° = \frac{-1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \boxed{\frac{-\sqrt{2}}{2}}$

3) *Sec* -30°

a)



b) 30°

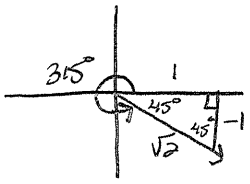
c) $\sec -30° = \frac{1}{\cos -30°} = \frac{1}{\frac{\sqrt{3}}{2}}$

$= \frac{2}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}}$

$= \boxed{\frac{2\sqrt{3}}{3}}$

4) *Cos* $\frac{7\pi}{4}$ $\frac{7(180)}{4} = 315°$

a)



b) 45°

c) $\cos 315° = \frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \boxed{\frac{\sqrt{2}}{2}}$