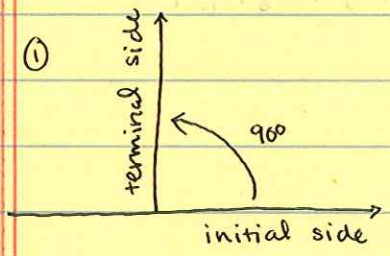
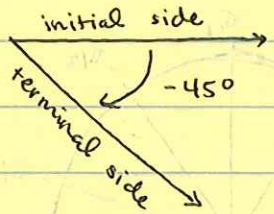
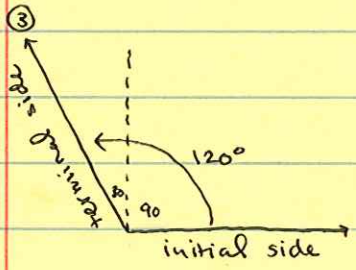
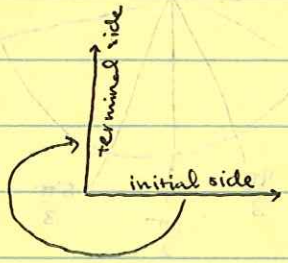
HW 27 Solutions

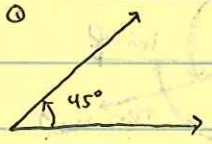
① 

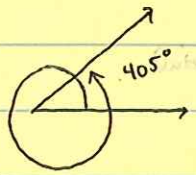
② 

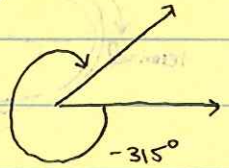
③ 

④ 

Bonus Questions

① 

② 

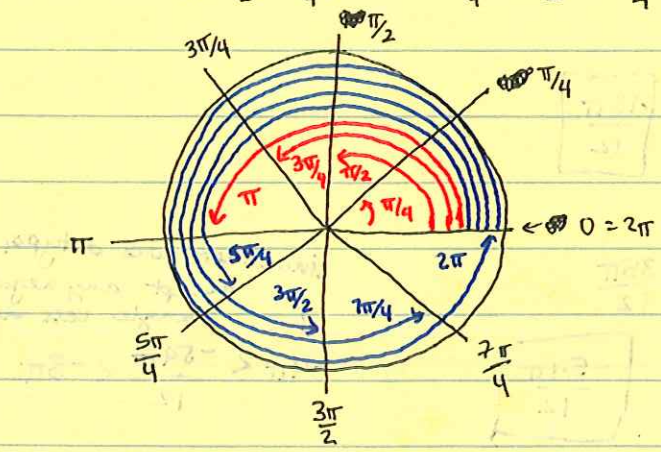
③ 

6.1.7) Angle of least positive measure coterminal w/ $\theta = -622°$

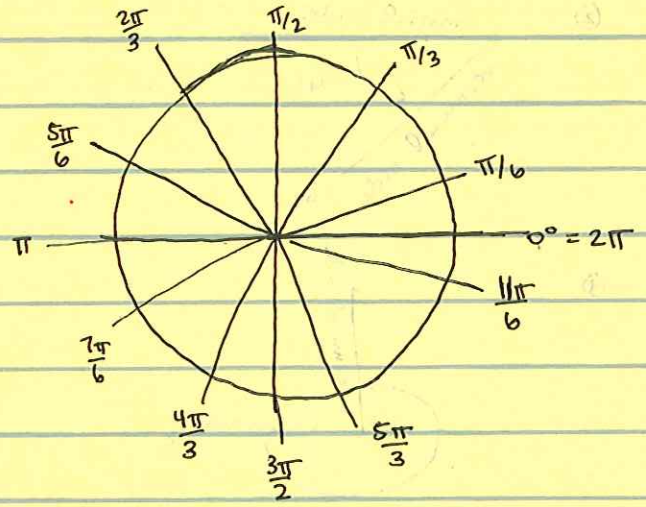
$-622 + 360 = \boxed{-262°}$

$-262 + 360 = \boxed{98°}$ ←

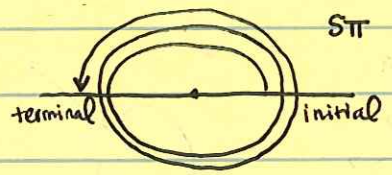
- Draw $0, \frac{\pi}{4}, \frac{\pi}{2}, \frac{3\pi}{4}, \pi, \frac{5\pi}{4}, \frac{3\pi}{2}, \frac{7\pi}{4}, 2\pi$



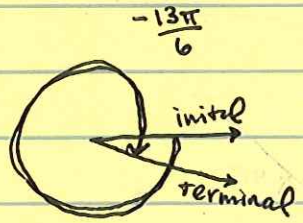
• Draw $0, \frac{\pi}{6}, \frac{\pi}{3}, \frac{\pi}{2}, \frac{2\pi}{3}, \frac{5\pi}{6}, \pi, \frac{7\pi}{6}, \frac{4\pi}{3}, \frac{3\pi}{2}, \frac{5\pi}{3}, \frac{11\pi}{6}, 2\pi$



6.1.10.)



6.1.13.)



6.1.16.) $15° \times \frac{\pi \text{ rad}}{180°} = \boxed{\frac{5\pi}{60} \text{ rad}}$

$\frac{5\pi}{60} \text{ rad} \rightarrow \frac{\pi}{12} \text{ rad}$

6.1.18.) $-540° \times \frac{\pi \text{ rad}}{180°} = \boxed{-3\pi \text{ radians}}$

6.1.22.) $\frac{3\pi}{5} \times \frac{180°}{\pi \text{ rad}} = \boxed{108°}$

6.1.26.) $3^{\text{rad}} \times \frac{180°}{\pi \text{ rad}} = \boxed{\frac{540°}{\pi}}$

6.1.31.) $\frac{-11\pi}{12} + \frac{24\pi}{12} = \boxed{\frac{13\pi}{12}}$

$\frac{-11\pi}{12} - \frac{24\pi}{12} = \frac{-35\pi}{12}$

$\frac{-35\pi}{12} - \frac{24\pi}{12} = \boxed{\frac{-59\pi}{12}}$

since there was a typo, I'll accept any negative angle less than -8π

$-4\pi < \frac{-59\pi}{12} < -8\pi$