

Hns Math 3 Homework for the Investigation of Reference and Coterminal Angles

I. State the reference angle for each of the following angles. Then state 2 coterminal angles, one positive and one negative. Answer questions given in degree measure with degrees and questions in radian measure in radians.

1. 120° 60°
 480° , -240°

2. $\frac{3\pi}{4}$ $\frac{\pi}{4}$
 $\frac{11\pi}{4}$, $-\frac{5\pi}{4}$

3. -210° 30°
 150° , -570°

4. $\frac{11\pi}{6}$ $\frac{\pi}{6}$
 $\frac{23\pi}{6}$, $-\frac{\pi}{6}$

5. 390° 30°
 30° , -330°

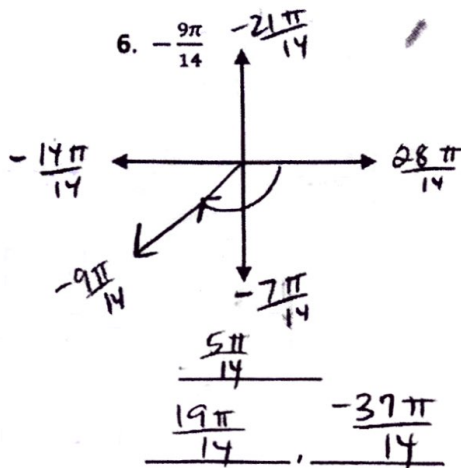
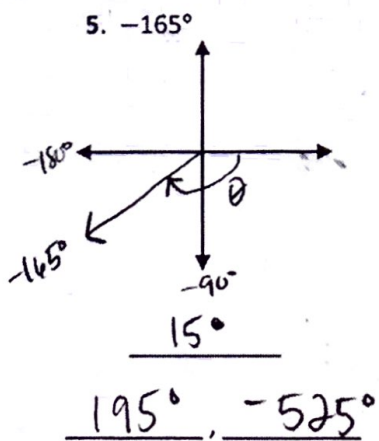
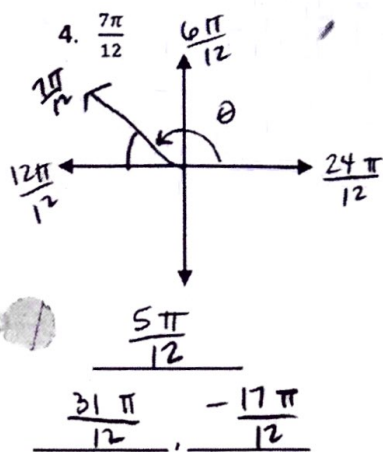
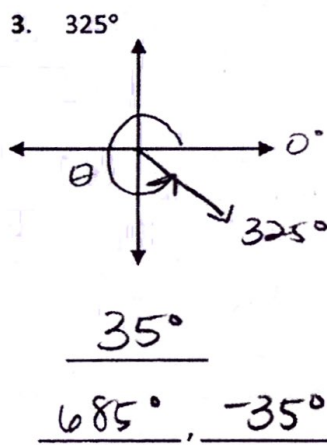
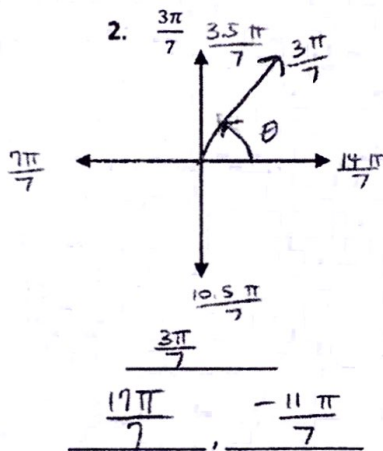
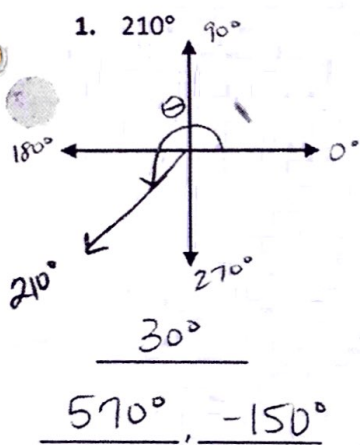
6. $-\frac{10\pi}{3}$ $\frac{\pi}{3}$
 $-\frac{4\pi}{3}$, $\frac{2\pi}{3}$

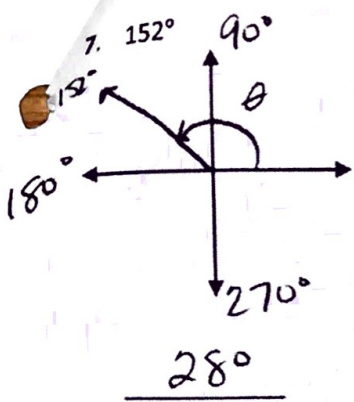
7. $\frac{10\pi}{3}$ $\frac{\pi}{3}$
 $\frac{4\pi}{3}$, $-\frac{2\pi}{3}$

8. 570° 30°
 210° , -150°
 930°

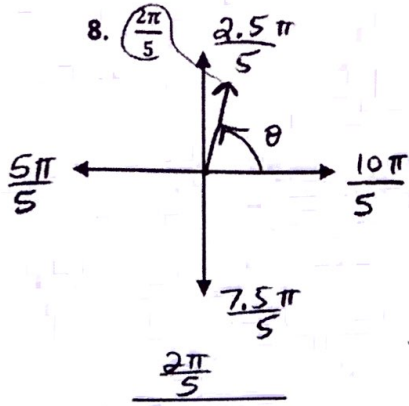
9. $-\frac{11\pi}{4}$ $\frac{\pi}{4}$
 $-\frac{3\pi}{4}$, $\frac{5\pi}{4}$

II. Sketch each of the following angles in standard position. Then find the reference angle and state 2 coterminal angles, one positive and one negative. Answer questions given in degree measure with degrees and questions in radian measure in radians.

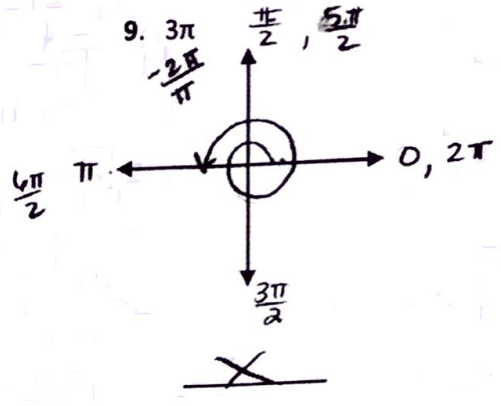




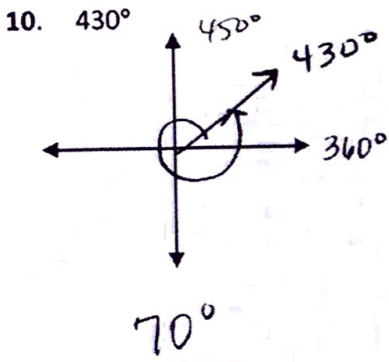
512° , -208°



$\frac{12\pi}{5}$, $-\frac{8\pi}{5}$

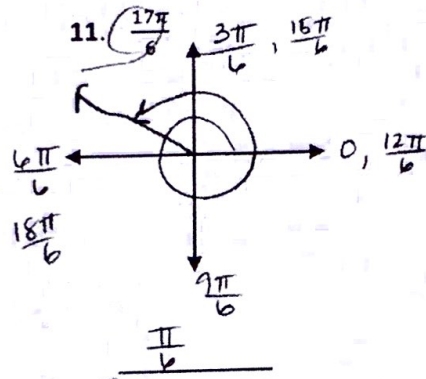


π , 5π , $-\pi$



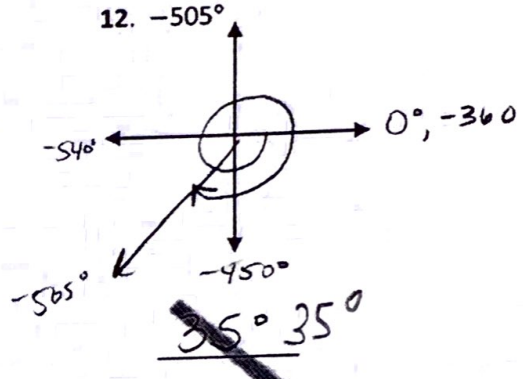
~~70°~~ , ~~-290°~~

70°



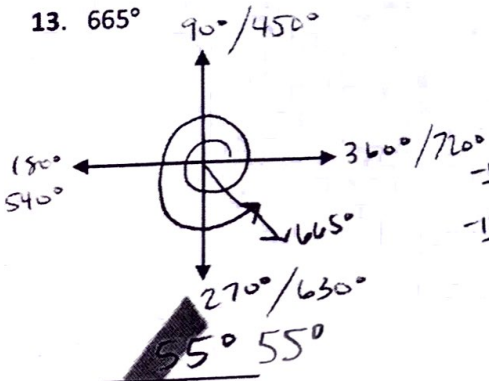
~~$\frac{5\pi}{6}$~~ , ~~$-\frac{7\pi}{6}$~~

$\frac{5\pi}{6}$



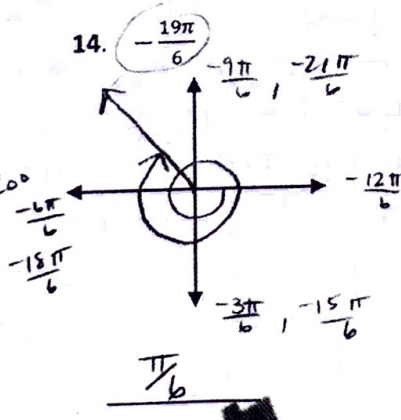
~~35°~~ , ~~215°~~

215°



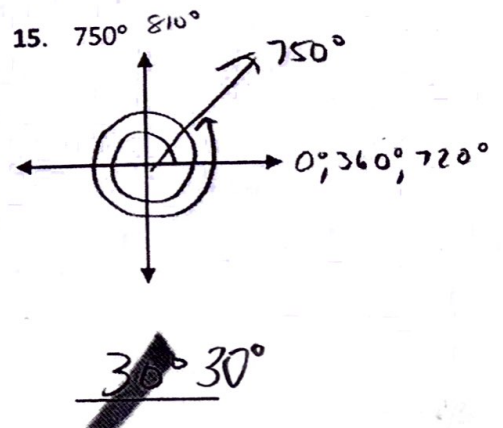
~~305°~~ , ~~-55°~~

305°



~~$-\frac{7\pi}{6}$~~ , ~~$\frac{5\pi}{6}$~~

$\frac{5\pi}{6}$



~~30°~~ , ~~390°~~ , ~~-330°~~

390°

Can use coterminal to find ref. angle