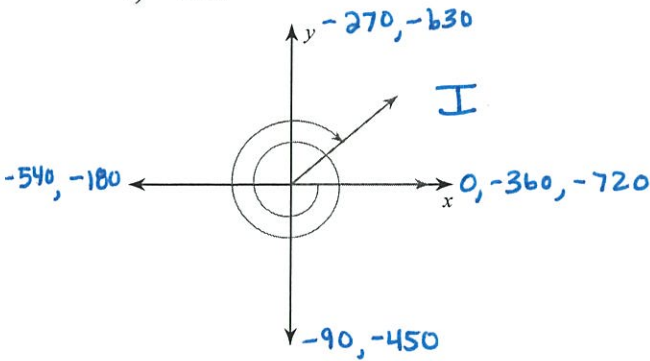


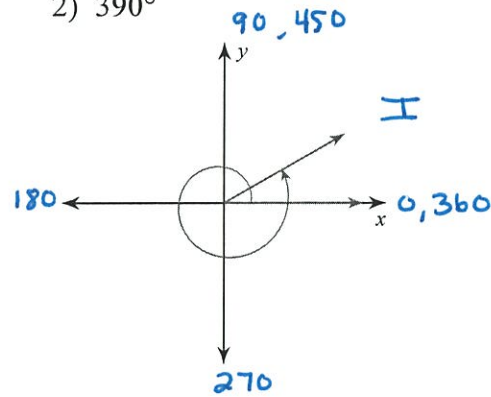
SECTION 4.1 STUDY GUIDE

DRAW AN ANGLE WITH THE GIVEN MEASURE IN STANDARD POSITION AND STATE THE QUADRANT IN WHICH THE TERMINAL SIDE OF EACH ANGLE LIES.

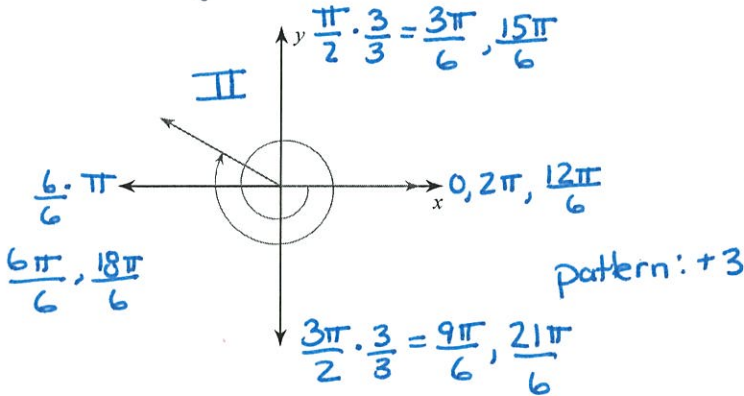
1)  $-680^\circ$



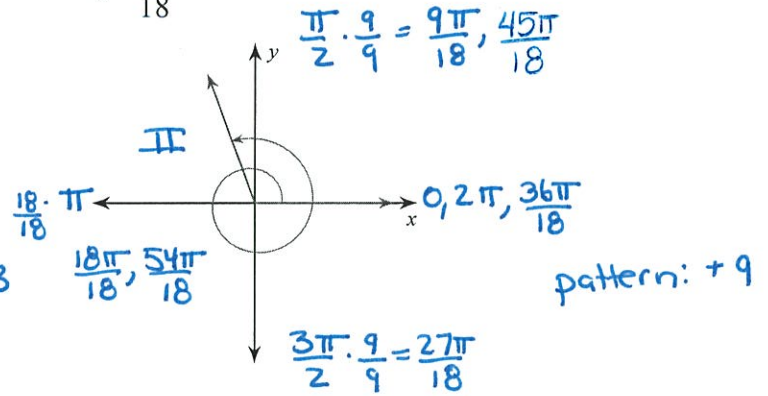
2)  $390^\circ$



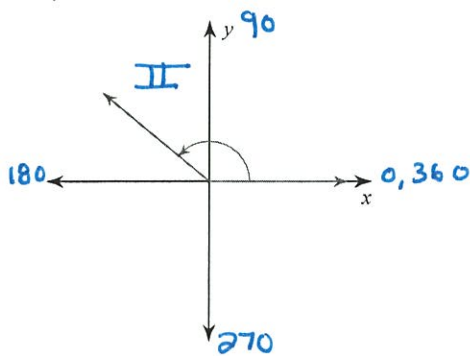
3)  $-\frac{19\pi}{6}$



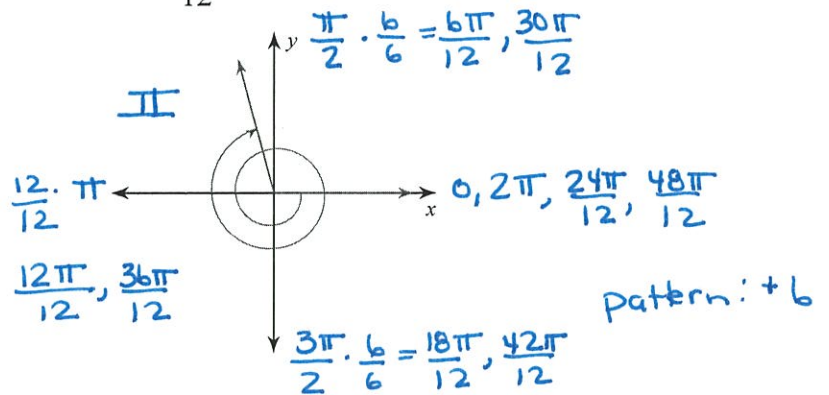
4)  $\frac{47\pi}{18}$



5)  $140^\circ$



6)  $-\frac{41\pi}{12}$



FIND A POSITIVE AND NEGATIVE COTERMINAL ANGLE FOR EACH GIVEN ANGLE.

7)  $275^\circ$

$$275 + 360 = \boxed{635^\circ}$$

$$275 - 360 = \boxed{-85^\circ}$$

9)  $-510^\circ$

$$-510 + 360 = \boxed{-150^\circ}$$

$$-150 + 360 = \boxed{210^\circ}$$

11)  $-\frac{3\pi}{2}$

$$\frac{2\pi \cdot 2}{1 \cdot 2} = \frac{4\pi}{2}$$

$$-\frac{3\pi}{2} + \frac{4\pi}{2} = \boxed{\frac{\pi}{2}}$$

$$-\frac{3\pi}{2} - \frac{4\pi}{2} = \boxed{-\frac{7\pi}{2}}$$

8)  $580^\circ$

$$580 - 360 = \boxed{220^\circ}$$

$$220 - 360 = \boxed{-140^\circ}$$

10)  $-\frac{3\pi}{4}$

$$\frac{2\pi \cdot 4}{1 \cdot 4} = \frac{8\pi}{4}$$

$$-\frac{3\pi}{4} + \frac{8\pi}{4} = \boxed{\frac{5\pi}{4}}$$

$$-\frac{3\pi}{4} - \frac{8\pi}{4} = \boxed{-\frac{11\pi}{4}}$$

12)  $\frac{41\pi}{36}$

$$\frac{2\pi \cdot 36}{1 \cdot 36} = \frac{72\pi}{36}$$

$$\frac{41\pi}{36} + \frac{72\pi}{36} = \boxed{\frac{113\pi}{36}}$$

$$\frac{41\pi}{36} - \frac{72\pi}{36} = \boxed{-\frac{31\pi}{36}}$$

CONVERT EACH DEGREE MEASURE INTO RADIANS AND EACH RADIAN MEASURE INTO DEGREES.

13)  $315^\circ \cdot \frac{\pi}{180} = \frac{315\pi}{180} = \boxed{\frac{7\pi}{4}}$

14)  $\frac{25\pi}{12} \cdot \frac{180}{\pi} = \frac{4500}{12} = \boxed{375^\circ}$

15)  $-\frac{11\pi}{36} \cdot \frac{180}{\pi} = -\frac{1980}{36} = \boxed{-55^\circ}$

16)  $-\frac{875^\circ}{1} \cdot \frac{\pi}{180} = -\frac{875\pi}{180} = \boxed{-\frac{175\pi}{36}}$

FIND THE COMPLEMENT AND SUPPLEMENT OF THE ANGLE. IF NOT POSSIBLE WRITE, N/A.

17)  $2\pi/5$

$$C: \left(\frac{\pi}{2}\right) - \left(\frac{2\pi}{5}\right) = \frac{5\pi}{10} - \frac{4\pi}{10} = \boxed{\frac{\pi}{10}}$$

$$S: \left(\frac{\pi}{1}\right) - \frac{2\pi}{5} = \frac{5\pi}{5} - \frac{2\pi}{5} = \boxed{\frac{3\pi}{5}}$$

19)  $36^\circ$   
 C:  $90 - 36 = \boxed{54^\circ}$   
 S:  $180 - 36 = \boxed{144^\circ}$

18)  $4\pi/5$

$$C: \frac{4\pi}{5} > \frac{\pi}{2} \quad \frac{8\pi}{10} > \frac{5\pi}{10} \quad \boxed{N/A}$$

$$S: \left(\frac{\pi}{1}\right) - \frac{4\pi}{5} = \frac{5\pi}{5} - \frac{4\pi}{5} = \boxed{\frac{\pi}{5}}$$

20)  $109^\circ$

-2-  
 C:  $109 > 90 \quad \boxed{N/A}$   
 S:  $180 - 109 = \boxed{71^\circ}$