

2) Change each degree measure to a radian measure by ...

a)  $-30^\circ =$   $-\pi/6$

$-30^\circ \cdot \frac{\pi}{180^\circ}$

d)  $200^\circ =$   $10\pi/9$

$200 \cdot \frac{\pi}{180}$

$= \frac{20\pi}{18} = \frac{10\pi}{9}$

b)  $18^\circ =$   $\pi/10$

$18^\circ \cdot \frac{\pi}{180}$

e)  $-36^\circ =$   $-\pi/5$

$-36^\circ \cdot \frac{\pi}{180}$

$= -\frac{\pi}{5}$

c)  $144^\circ =$   $\frac{4\pi}{5}$

$144 \cdot \frac{\pi}{180} = \frac{72\pi}{90}$

f)  $115^\circ =$   $\frac{23\pi}{36}$

$115 \cdot \frac{\pi}{180} = \frac{23\pi}{36}$

$= \frac{23\pi}{36}$

### PreCalc Unit #14.1 Radians, Angle Terminology Stations

3) Change each radian measure to a degree measure by ...  $\frac{180}{\pi}$

a)  $\frac{5\pi}{12} =$   $75^\circ$

$\frac{5\pi}{12} \cdot \frac{180}{\pi}$

b)  $\frac{11\pi}{3} =$   $660^\circ$

$\frac{11\pi}{3} \cdot \frac{180}{\pi}$

c)  $\frac{13\pi}{18} =$   $130^\circ$

$\frac{13\pi}{18} \cdot \frac{180}{\pi}$

d)  $\frac{7\pi}{20} =$   $63^\circ$

$\frac{7\pi}{20} \cdot \frac{180}{\pi}$

e)  $-\frac{9\pi}{4} =$   $-405^\circ$

$-\frac{9\pi}{4} \cdot \frac{180}{\pi}$

f)  $\frac{8\pi}{15} =$   $96^\circ$

$\frac{8\pi}{15} \cdot \frac{180}{\pi}$



## PreCalc Unit #14.1 Radians, Angle Terminology Stations

5) Find one positive and one negative angle that is coterminal with the given angle.

a)  $-68^\circ$   $292^\circ$  &  $-428^\circ$   
 $\pm 360$

b)  $253^\circ$   $613^\circ$  &  $-107^\circ$   
 $+360$        $-360$

c)  $\frac{\pi}{3}$   $\frac{7\pi}{3}$  &  $\frac{-5\pi}{3}$   
 $+ \frac{2\pi}{3} = \pm \frac{6\pi}{3}$

d)  $-\frac{\pi}{2}$   $\frac{3\pi}{2}$  &  $\frac{-5\pi}{2}$   
 $\pm 2\pi$   
 $\pm \frac{4\pi}{2}$

e)  $\frac{5\pi}{4}$   $\frac{13\pi}{4}$  &  $\frac{-3\pi}{4}$   
 $\pm 2\pi = \pm \frac{8\pi}{4}$

f)  $\frac{7\pi}{6}$   $\frac{19\pi}{6}$  &  $\frac{-5\pi}{6}$   
 $\pm 2\pi$   
 $\pm \frac{12\pi}{6}$

