Name:_____

Radians Day 1

Find the radian measure of the angle with the given degree measure

1. 72^0 $\frac{2\pi}{5}$

2. -45^0 $-\frac{\pi}{4}$

3. -75^0 $\cdot\frac{\pi}{180} = \frac{-5\pi}{12}$

4. 1080^0 6π

Find the degree measure of the angle with the given radian measure

5. $\frac{7\pi}{6}$ $\cdot\frac{180}{\pi} = 30$ 210^0

6. $-\frac{5\pi}{4}$ -225^0

7. $\frac{5\pi}{18}$ 50^0

8. 13 $\cdot\frac{180}{\pi} = \frac{2340}{\pi}$ $\approx 745^0$

Find two positive and two negative coterminal angles for the given radian measure

9. $\frac{3\pi}{4}$ $+\frac{8\pi}{4} = \boxed{\frac{11\pi}{4}}$ $+\frac{8\pi}{4} = \boxed{\frac{19\pi}{4}}$

$-\frac{8\pi}{4} = \boxed{\frac{-5\pi}{4}}$ $-\frac{8\pi}{4} = \boxed{\frac{-13\pi}{4}}$

10. $\frac{-5\pi}{8}$ $\frac{11\pi}{8}, \frac{21\pi}{8}$

$\frac{-21\pi}{8}, \frac{-37\pi}{8}$

Find an angle between 0 and 2π that is coterminal with the given angle

11. $\frac{17\pi}{6}$ $\frac{5\pi}{6}$

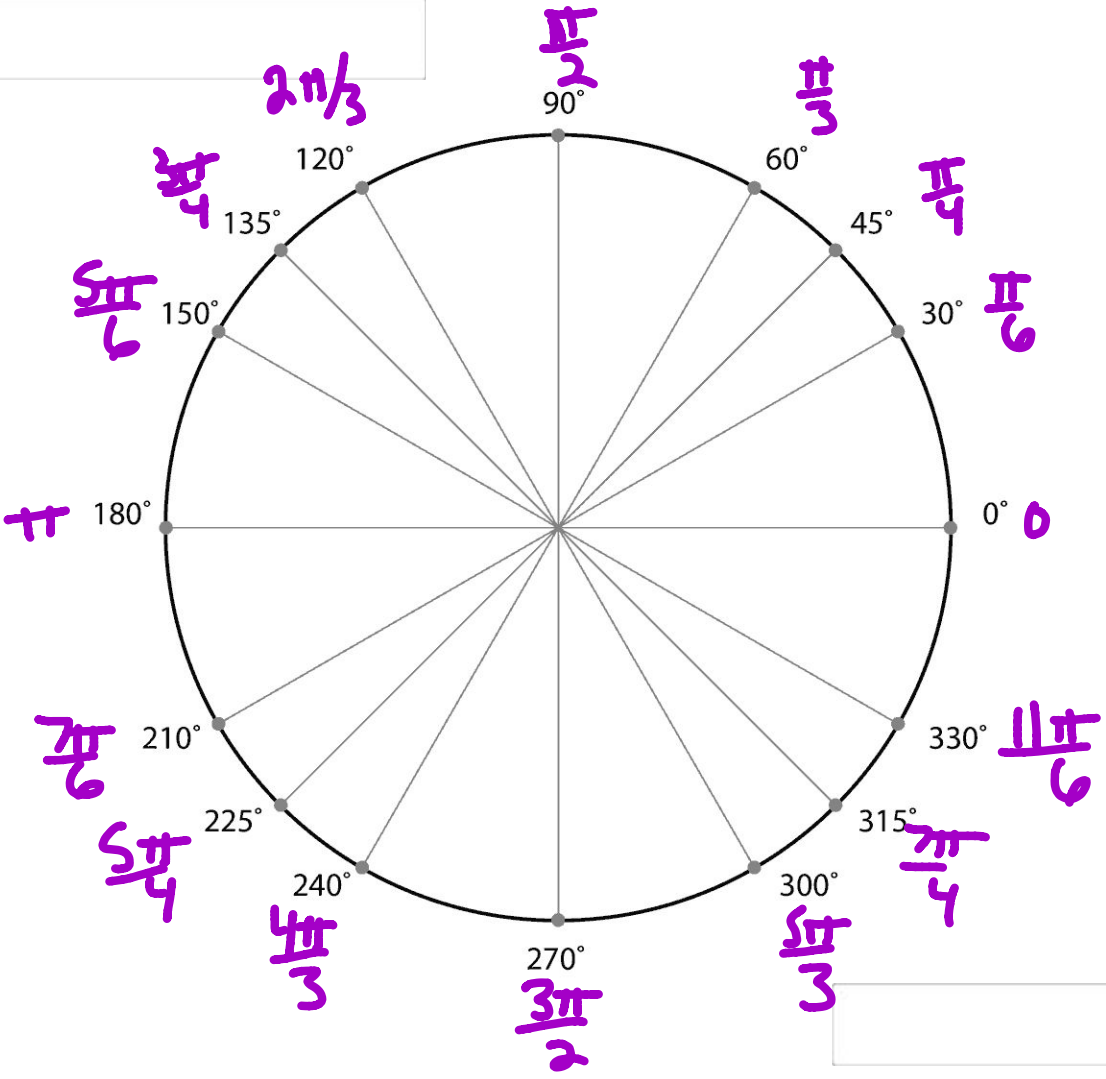
12. $-\frac{7\pi}{3}$ $\frac{5\pi}{3}$

13. 87π π

14. $\frac{17\pi}{4}$ $-\frac{8\pi}{4} = \frac{11\pi}{4}$

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

Fill in the radian values. Try to look at the values as a part to the whole circle instead of converting every degree value.


90°
$\frac{\pi}{2}$
60°
$\frac{\pi}{3}$
45°
$\frac{\pi}{4}$
30°
$\frac{\pi}{6}$
0°
0
330°
$\frac{11\pi}{6}$
315°
$\frac{7\pi}{4}$
300°
$\frac{5\pi}{3}$
270°
$\frac{3\pi}{2}$
240°
$\frac{4\pi}{3}$
225°
$\frac{5\pi}{4}$
210°
$\frac{7\pi}{6}$
180°
π
150°
$\frac{5\pi}{6}$
135°
$\frac{3\pi}{4}$
120°
$2\pi/3$