King Fahd University of Petroleum and Minerals
Prep-Year Math Program
Math 002 - Term 142
Recitation (6.1)

Question 1:

a) Convert $-108°$ to radian measure.

b) Convert $\frac{9\pi}{5}$ radians to degree measure.

Answer: **(a):** $-108° = -\frac{3\pi}{5}\ radians$ **(b):** $\frac{9\pi}{5} = 324°$

Question 2: Find the smallest positive angle coterminal with the angle $\theta = -\frac{33\pi}{5}$.

Answer: The smallest positive coterminal is $\frac{7\pi}{5}$

Question 3: Find the reference angle of the following angles

(a): $\theta = \frac{9\pi}{5}$ **(b):** $\theta = 10$

Answer: **(a):** $\frac{\pi}{5}$ **(b):** $10 - 3\pi$

Question 4:

The length s of the arc that subtends the central angle $\theta = 35^\circ\ 30'$ in a circle of diameter $d = 720$ centimeter is

A) 71π cm
B) 36π cm
C) 180π cm
D) 90π cm
E) 31π cm

Answer: 71π cm

Question 5: If $\theta = \frac{13\pi}{18}$, then the degree measure of the reference angle of θ is:

A) 50° B) 60° C) 45° D) 70° E) 36°

Answer: A) 50°