King Fahd University of Petroleum and Minerals

Prep-Year Math Program

Math 002 - Term 132

Recitation (5.1)

Question1

Let A and B be the smallest positive and largest negative coterminal angles with $\theta = -873°$, then $2A - B =$

A) $513°$ B) $510°$ C) $570°$ D) $573°$ E) $576°$

Answer: (E): $576°$

Question2

i) Find the supplement of the angle $57° 36' 27''$.

ii) Find the smallest positive angle that is coterminal to $-827°$.

iii) Find the quadrant in which the angle $\theta = -5280°$ terminates.

iv) Write 89.9004° as DMS (Degree Minute Second) Format.

Answer: (i): $122° 23' 33''$ **(ii):** $253°$

(iii): The angle $\theta = -5280°$ is in quadrant II **(iv):** $89^{\circ}\ 54'\ 1.44''$

Question3 If $\alpha = 12°\ 32'\ 47''$ and $\beta = 29°\ 33'\ 17''$, find the complement of $\alpha + \beta$.

Answer: $47°\ 53'\ 56''$

Question4

An airplane propeller rotates 1000 times per min. Find the number of degrees that a point on the edge of the propeller will rotate in 1 se.

Answer: $6000°$ in 1 sec.

Question5

Which one of the following is NOT conterminal with 20° ?

A) -700°

B) 380°

C) 740°

D) 340°

E) -340°