

**KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS**  
**MATHEMATICAL DEPARTMENT**

Math. 002

Term(051)

Quiz 2

Name:

I.D.#

Sec.# 09

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**SHOW ALL YOUR WORK**

Q1. For  $\frac{\pi}{2} < t < \pi$ , write  $\tan t$  in terms of  $\sin t$ .

Q2. The angle of elevation to the top of a radio antenna on the top of building is  $45^\circ$ . After moving 50 cm closer to the building, the angle of elevation is  $60^\circ$ . Find the height of the building if the height of the antenna is 100cm.

Q3. Find the exact value of  $\cot\left(\frac{-29\pi}{3}\right) + \cos\frac{35\pi}{4}$

Q4. If the terminal side of an angle  $\theta$  lies on the line  $2y + x = 0$  in second quadrant, then find  $\csc\theta - \tan\theta$ .

Q5. Convert decimal degree measure  $20.32^\circ$  to degree-minute-second.