

KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS  
MATH 101 (SECTION-9)  
INSTRUCTOR: Dr. Ahmad Al-Dweik  
Quiz 2

Name:

ID:

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Sec.:

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1. (6 points) If  $f(x) = \tan\left(\frac{x}{2} + \sin x\right)$ , find

i)  $f(\pi)$

ii)  $\lim_{x \rightarrow \pi^+} f(x)$

iii)  $\lim_{x \rightarrow \pi^-} f(x)$

2. (4 points) Find the equation of the tangent line to the curve  $y = x^3 - 1$  at the point  $(0, -1)$ .