

King Fahd University of Petroleum & Minerals
Department of Math and Stat
Math 106 Semester 182 - Quiz 3

Name _____ ID No. _____

1) If $f(x) = \frac{2x - 3}{x - 4}$, determine the intervals on which f is increasing and the intervals on which f is decreasing.

2) A business revenue is given by $R(x) = \frac{40x}{x^2 + 25}$ where x is the time. Find the greatest revenue.

3) Given $y = f(x) = x^3 - 3x^2 + 10$ on the interval $[0, 4]$, find the values of x at which absolute maxima and absolute minima occur.