

King Fahd University of Petroleum & Minerals

Department of Mathematical Sciences

Math 101 (Term 051) Quiz # 5

Name

ID#

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Q1) Find the limits using the indeterminate forms.

(a)  $\lim_{x \rightarrow 0} (1 + 2x)^{-3/x}$

(b)  $\lim_{x \rightarrow \infty} [\ln 2x - \ln(1+x)]$

(c)  $\lim_{x \rightarrow 0} \left( \frac{1}{x} - \frac{\cos 2x}{x} \right)$