

King Fahd University of Petroleum and Minerals  
Math. & Stat. Department  
162-Math 102 Quiz (1)

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| Name | ID | SEC |
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Q1) Evaluate  $\lim_{n \rightarrow \infty} \frac{1}{n} \sum_{i=1}^n \frac{1}{1 + (i/n)^2}$ .

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Q2) Evaluate  $\int_3^0 |x^2 - 4| dx$ .

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Q3) If  $f(x) = \int_{\tan x}^0 \frac{dt}{1+t^2}$ , find  $f'(\pi/6)$ .