

King Fahd University of Petroleum and Minerals
Department of Mathematical Sciences
(Term 042) **MATH 102**
Quiz# 1

Name: _____ ID# _____ Sec.#: _____

1. Approximate the area between the graph of $f(x) = x + 2$ and the interval $[0, 8]$ using 4 rectangles.

2. Integrate each of the following:

(a) $\int \left(\frac{7}{x^2} - \frac{5}{x} + 2e^{5x} \right) dx.$

(b) $\int \frac{dt}{\sec t}$

(c) $\int 4x(2 + x)^2 dx$

King Fahd University of Petroleum and Minerals
Department of Mathematical Sciences
(Term 042) **MATH 102**
Quiz# 1

Name: _____ ID# _____ Sec.#: _____

1. Approximate the area between the graph of $f(x) = 2x + 1$ and the interval $[0, 6]$ using 3 rectangles.

2. Integrate each of the following:

(a) $\int \left(\frac{3}{x^2} - \frac{2}{x} + 2e^{3x} \right) dx.$

(b) $\int \frac{dt}{\csc t}$

(c) $\int 3x(1 + 2x)^2 dx$