KFUPM | Term 172 | Date:8/2/2018

Mathematics & Statistics | MATH 102 | Duration: 20 minutes

Quiz# 2

Name: | ID #: | Section:

Q1: Let f be a continuous function on [-1,4] such that:

$$\int_{-1}^{2} f(t)dt = 5 \; and \; \int_{1}^{2} f(2t)dt = 2$$

Then $\int_{-1/3}^{4/3} f(3t)dt$

Q2: $\int_{-1}^{0} (x+1)\ e^{-x(x+2)}\, dx =$

Q3. Let $f(x) = \int_x^3 \sin(t^2)\, dt; then\ f'\left(\frac{\sqrt{\pi}}{2}\right)$

Q4. Let $v(t) = t^2 - t - 2$, be the velocity function (in meter per second) for a particle moving along a line. The total distance travelled by the particle
during the period $0 \leq x \leq 3$