

Worksheet 06

MATH 16B GSI:TAO SU TU 10/10/2017

1. Approximate the integral by the midpoint rule: $\int_0^4 (x^2 + 5)dx; n = 2$
2. Approximate the integral by the trapezoidal rule: $\int_0^1 (x - \frac{1}{2})^2 dx; n = 4$.
3. In 2012, the population density of a city t miles from the city center was $120e^{-6.5t}$ thousand people per square mile.
Write a definite integral whose value equals the number of people (in thousands) who lived within 5 miles of the city center.