Math 2123 - Math Center Worksheet
Section 5.8

1. Suppose the balance in a savings account is given by $P(t) = 100(1.047^t)$ dollars after t years. Find the average balance of the savings account over the first 8 years.

2. During the 1990's the civilian labor force in the Trident region of South Carolina was expanding at a rate of $p(x) = -2915x + 19{,}433$ people each year, x years after 1989. Find the average rate of change of the size of the civilian labor force between 1992 and 1995.

Find the general antiderivatives:

1. $\int x^6 \left(7 + \sqrt[3]{x}\right) dx$

2. $\int \dfrac{3 - 14x^6}{2x^7 - 3x + 11} \, dx$

Math 2123 - Math Center Worksheet
Section 6.1

Evaluate the following improper integrals:

1. $\displaystyle\int_{2}^{\infty} -9.63e^{0.14x}\ dx$

2. $\displaystyle\int_{5}^{\infty} \frac{9}{7x^4}\ dx$

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