

9 January 2006

Name: _____

DIRECTIONS: Answer the following questions below. Put only the answer, show no work whatsoever. We will go over the answers in class, but it is to your benefit to complete this quiz on your own, as a self-assessment. This quiz is due at the beginning of class on Thursday, 12 January.

1. $\frac{1}{2} + \frac{1}{7} + \frac{1}{9} =$

2. $\frac{1}{2} \cdot \frac{1}{7} \cdot \frac{1}{9} =$

3. Evaluate the derivatives of the following functions:

(a) $f(x) = 2x^7 + e^{2x} + \sin x$

(b) $g(x) = \ln(2x^7 + e^{2x} + \sin x)$

(c) $F(x) = \int_0^{2x} \sin(2t) dt$

4. Evaluate the following definite/indefinite integrals:

(a) $\int_0^2 x^2 dx$

(b) $\int \frac{1}{2x} dx$

(c) $\int \frac{1}{x^2} dx$

5. True or False: $(x + 4)^2 = x^2 + 16$ 6. True or False: $\frac{\sin(x)}{x} = \sin$