

Math 166: Honors Calculus II

Name: _____

Quiz 5 *Feb. 23, 1995*

1. a) Define the Taylor polynomial $T_n(f; a)$

b) State the following properties of $T_n(f)$: the Linearity Property, the Differentiation Property, the Integration Property, and the Substitution Property.

2. a) Derive the Taylor polynomial $T_n(\sin(x))$.

b) Calculate $T_n\left(\frac{x^2}{4+x^3}\right)$.