Quiz 4a Calculus 2 3/19/04

Each problem is worth 5 points. For full credit provide proper justification for your answer.

1. Find the Taylor polynomial of degree 3 approximating the function $f(x) = \sqrt[3]{1+x}$ for x near zero.

2. Find the Taylor polynomial of degree 5 for the function $g(x) = \sin x$ centered at x = 0.