

**Quiz 1      Calculus 2      8/29/2006**

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Find the most general antiderivative of the function  $f'(x) = 6\sqrt{x} - \sqrt[6]{x}$ .

2. Find  $f$  if  $f''(x) = 2 - 12x$ ,  $f(0) = 9$ , and  $f(2) = 15$ .