## Quiz $4 \quad$ Calculus $1 \quad 9 / 28 / 2007$

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

1. Differentiate the function $g(x)=x^{2}+\frac{1}{x^{2}}$.
2. Differentiate the function $y=\sqrt{x}\left(1-5 x^{2}+x^{3}\right)$.
