Math 165: Honors Calculus I
Name:
Quiz 2 Sept. 7, 1995

1. Find all real numbers $x$ satisfying $|x+2|<|2 x+2|$.
2. Find all polynomials $p$ of degree $\leq 2$ satisfying $p(1 / x)=1 / p(x)$ for all $x \neq 0$.
3. a) Define $\binom{n}{k}$.
b) State the Binomial Theorem.
c) Determine the coefficient of $x^{6}$ in $\left(3 x^{2}-5\right)^{12}$ (give its prime factorization!).
