Math 165: Honors Calculus I Name:
Quiz 2 Sept. 10, 1998

1. Find all real numbers $x$ satisfying $|2 x-2|<|x+1|$.
2. Find all polynomials $p(x)$ of degree $\leq 2$ satisfying $p(1+x)=p(1-x)$ for all $x$.
3. a) Define $\binom{n}{k}$.
b) State the Binomial Theorem.
c) Determine the coefficient of $x^{18}$ in $\left(2 x^{3}-5\right)^{10}$ (give its prime factorization!).
