Quiz 2 Sept. 7, 1995

1. Find all real numbers x satisfying |x+2| < |2x+2|.

2. Find all polynomials p of degree ≤ 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 $(3x^2 - 5)^{12}$ (give its prime factorization!).