Name: _____ Date: _____

Factor Theorem

Q1. Show that (x - 1)(x - 10)(x - 12) are factors of $x^3 - 23x^2 - 142x - 1$ 120

Q2. Find the value of k, if 3 - 2x is a factor of $p(x) = kx^3 - 9x^2 + x + 12$

Q3 Find the remainder when $3x^3+x^2-22x+9$ when divided by x-3.