Name: $\qquad$ Date: $\qquad$

## Factor Theorem

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

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

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

