Polynomial Functions - Worksheet

NAME:
DATE:

1. Is $x^2 - 3$ a factor of $4x^3 - 2x^2 - 12x + 5$?

2. Find the remainder when $f(x) = 3x^2 + 3x - 6$ is divided by $g(x) = x - 1$ without using division

3. Use the Factor Theorem to determine whether the function $f(x) = 2x^3 - x^2 + 2x - 3$ has the factor $x + 3$.

4. Find a polynomial with degree $n = 3$ with roots 2,5 and -1.