Secondary 3 Honors: **Polynomials Review** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Describe the end behavior using limits.

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State the degree, list zeros, state multiplicity, what happens at that zero and then sketch the graph of the polynomial by hand.

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Divide using long division and write a summary statement.

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Divide using synthetic division and write a summary statement.

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Use the Remainder Theorem to find the remainder when f(x) is divided by .

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Use the Rational Zeros Theorem to write a list of all potential rational zeros. Then determine which ones, if any, are zeros.

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Write a polynomial function of minimum degree in standard form with real coefficients whose zeros include those listed.

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State how many zeros the function has and identify how many are complex and how many are real.

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Find all zeros of the function and write in factored form.

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