Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_

Algebra 2 Honor Spiral 14 - Review

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| Polynomial Basics | |
| 1. Simplify each expression below a.   b. | 1. Sketch a graph of this polynomial:       Describe the end behavior:  as  ,  as |
| Polynomial Division and Special Factoring | |
| 1. Find the quotient.   a.    Is x+2 a factor of ?  b.    Is x = 1 a zero of ? | 1. Factor completely:   a.  b. |
| Rational Root Theorem | |
| 1. Given , (a) write down all possible rational roots (good guesses); (b) completely factor f(x); (c) list all roots of f(x). | 1. Given, (a) write down all possible rational roots (good guesses); (b) completely factor f(x); (c) list all roots of f(x). |
| Polynomial Equations & Applications | |
| 1. Write an equation of least degree for the graph below. Don’t forget to consider the end behavior! | |