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

Algebra 2 Honor Spiral 14 - Review

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| Polynomial Basics  |
| 1. Simplify each expression belowa.

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).
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| Polynomial Equations & Applications  |
| 1. Write an equation of least degree for the graph below. Don’t forget to consider the end behavior!

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