Honors Algebra 2 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Review 6-4 Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_

Solve Polynomial Functions by Graphing

1. The dimensions in inches of a shipping box at We Ship 4 You can be expressed as width **x**,

 length ***x* + 5**, and height **3*x* – 1**. The volume is about 7.6 ft3. Find the dimensions of the box in

 inches. Round to the nearest inch.

2. The polynomial 550x³ + 600x² + 650x represents Emilie’s savings, with interest, after 3 years from

 babysitting jobs. The annual interest rate equals x – 1. Find the interest needed so that she will

 have $2000 after 3 years.

3. The product of three consecutive integers n, n - 1, and n + 1 is -336.

 Write and solve an equation to find the integers.

4. A storage company needs to design a new storage box that has twice the volume of

 its largest box. Its largest box is 5 ft. long, 4 ft. wide, and 3 ft. high. The new box must

 be formed by increasing each dimension by the same amount. Find the increase in each

 dimension.

5. The product of three consecutive even integers n, n + 2, and n + 4 is 960. Write and solve an

 equation to find the integers.