Algebra 2 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Remainder & Factor Theorem Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_

**Use the Remainder Theorem to evaluate the polynomial.**

|  |  |
| --- | --- |
| 1.) | 2.) |

**Using the Remainder Theorem, determine if the value is a zero of the polynomial.**

|  |  |  |
| --- | --- | --- |
| 3.) | 4.) | 5.) Determine the value of d if x = 3 is a zero of the polynomial **.** |

**Using the Factor Theorem, determine if the polynomial expression is a factor of the polynomial.**

|  |  |
| --- | --- |
| 6.) (x – 2); | 7.) (x – 7); |

**Factor the polynomial function completely given one of its factors:**

|  |  |
| --- | --- |
| 8.) ; (x – 2) | 9.); (x + 3) |