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

Polynomial Transformations Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_\_\_

**Describe the transformations for each function by filling in the table below.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Function** | **Parent Function** | **Vertical Reflection?** | **Horizontal Reflection?** | **Horizontal Shift: Direction? How many?** | **Vertical Shift: Direction? How many?** |
| 1.)  |  |  |  |  |  |
| 2.)  |  |  |  |  |  |
| 3.) |  |  |  |  |  |
| 4.) |  |  |  |  |  |
| 5.) |  |  |  |  |  |

**Graph the parent function for each f(x) and use the transformations from above to graph. Use different colors to help you show each transformation!**

|  |  |
| --- | --- |
| 6.) Use the function from # 2 above | 7.) Use the function from # 5 above |