**CCGPS Advanced Algebra Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| **Unit: 2** | **Homework**: 6 |
| **Standard**: **Build a function that models a relationship between two quantities**  **MGSE9-12.F.BF.1c** Compose functions. |
| **Essential Questions:** How can I compose two polynomial functions? |
| **Key Words**: polynomial function, function composotion |
| For each of the following functions: (a) Find f(g(x))(b) Find g(f(x)) |

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| 1. f(x) = 2x + 1, g(x) = 3x + 2 | 2. f(x) = x - 3 , g(x) = 3x² |
| 3. f(x) = 2x² , g(x) = x + 5 | 4. f(x) = x - 1, g(x) = 3x + 6 |
| 5. f(x) = x + 6, g(x) = x² + x | 6. f(x) = x³ + 4, g(x) = x² |
| 7. f(x) = 4x² + 1, g(x) = 3x + 5 | 8. f(x) = x + 10, g(x) = 10x² + 2 |
| 9. f(x) = 2x² + x + 3, g(x) = x – 2 | 10. f(x) = x³ + x² - x + 2, g(x) = 3x |