**Algebra II Homework #1 Function Operations Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Given **and**, find each function.**

|  |  |  |
| --- | --- | --- |
| **2.** (*f* + *g*)(2) | **3.** (*f* - *g*)(-4) | **4.** (*g* - *f* )(-1) |

**Given ** and *g*(*x*) = *x* + 1, find each function.**

|  |  |  |
| --- | --- | --- |
| **5.** | **6.** | **7.** |

**Given ** and *g*(*x*) = 7 - *x*, find each value.**

|  |  |  |
| --- | --- | --- |
| **8.** *f* (*g* (5)) | **9.** *g* (*f* (5)) | **10.** *f* (*g* (-2)) |

**Given**, , and, write each composite function.**

|  |  |  |
| --- | --- | --- |
| 11. | 12. | 13. |
| 14. | 15. | 16. |

**Use the tables to find each value.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **17.**(*g* ◦ *f* )(4) | **18.** (*f* ◦ *g*)(3) | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **x** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | | **f(x)** | **0** | **1** | **2** | **3** | **4** | **5** | **6** | |
| **19.** *g*(*f* (2)) | **20.** *f* (*g*(4)) | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **x** | **0** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | | **g(x)** | **1** | **2** | **4** | **8** | **16** | **32** | **64** | **128** | |