***Review 7-6 through 7-8 and domain.***

**Let *f*(*x*) =** **3*x*2** – **2*x* and *g*(*x*) =** ***x*** – **6. Find each value.**

**1.** (*f* − *g*)(2) **2.**  (−1) **3.** (*g* ◦ *f*)(3) **4.** (*f* ◦ *g*)(0)

**Find the inverse of each function algebraically. Is the inverse a function?**

**5.** *y* = *x*2 + 2 **6.** *y* = (*x* + 3)2 **7.** *y* = 2*x* − 1

**For each function *f*, find *f***–**1 algebraically, find the domain and range of *f* and *f***–**1. Write the domain and range in interval notation. Determine whether *f***–**1 is a function.**

**8.** *f*(*x*) =  + 2 **9.** ƒ(*x*) = *x*2 − 2 **10.** *f*(*x*) = 

**Let ƒ(*x*) = -2*x*2 − 1 and** ***g*(*x*) =** **3*x*** – **4. Find each combination.**

**11.** (g− *f*)(x) **12.** (*f* ◦ *g*)(x) **13.** (*g* ◦ *g*)(x) **14.**  (x), what is the domain of  (x)

**Let *f*(*x*) =** **2*x*** + **5. Find each value.** **15.** (*f*−1◦ *f*)(-1) **16.** *f( f*−1)

**Graph each function.**

**17.** *y* =  **18.** *y* =  − 1 **19.** *y* =  + 3

**20.** *y* =   **21.** *y* =  **22.**  *y* = 

**State the domain using interval notation.**

**23.**  **24.** 

**25.  26. **