**Review for Quiz #5.1**

**Topics: Inverse Functions, Operations with Functions, Even/Odd Functions**

1. Algebraically determine whether the functions are odd, even, or neither.
	1. $f\left(x\right)= -x^{2}+2x-4$
	2. $g\left(x\right)=x^{3}-7x$
	3. $h\left(x\right)=-4x^{4}+3x²-17$
2. A company produces *x* units of a product per month, where  represents the total cost and  represents the total revenue for the month. The functions are modeled by  and . The profit is the difference between revenue and cost where . What is the total profit, , for the month?

|  |  |
| --- | --- |
| 1) |  |
| 2) |  |
| 3) |  |
| 4) |  |

1. Determine the inverse of $f\left(x\right)=2x+5$. Show by compositions that it is in fact the correct inverse!