**In Class Assignment # 1(1.1 – 1.3)**

**Please show all of your work on separate piece of paper for maximum credit. Good Luck!!**

1. The given table describes the relationship of the number of 49ers victories Vs. time, in years after the year 2000.



( a ) Is t a function of w? Why or Why not?

( b ) Is w a function of t? Why or Why not?



1. Find the slope and the y-intercept for each of the following linear functions.

( a )



4. The following table shows the cost for an organization to purchase different numbers of specially designed T-shirts.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| **Number of shirts** | **20** | **50** | **100** | **200** |
| **Cost (dollars)** | **165** | **360** | **685** | **1335** |
|  |  |  |  |  |

(a) Show that the cost appears to be a linear function of the number of shirts. Find a formula for the linear function.

(b) Explain in practical terms what the slope and the y-intercept represents in this situation.

**5. Find the difference quotient of the following functions:**

**( a ) f(x) = ( b ) g(x) =**