Technology Assignment
College Costs

In this assignment you'll document the solution to the problem below using Mathtype and Excel. Follow my lead and utilize the tools as instructed.

*Internet Brokerage Accounts* The number of brokerage accounts on the Internet in year t can be modeled by $B(t) = 3.303t - 6591.560$ million accounts. If this model remains valid, in what year were there 14.xxxx million accounts?

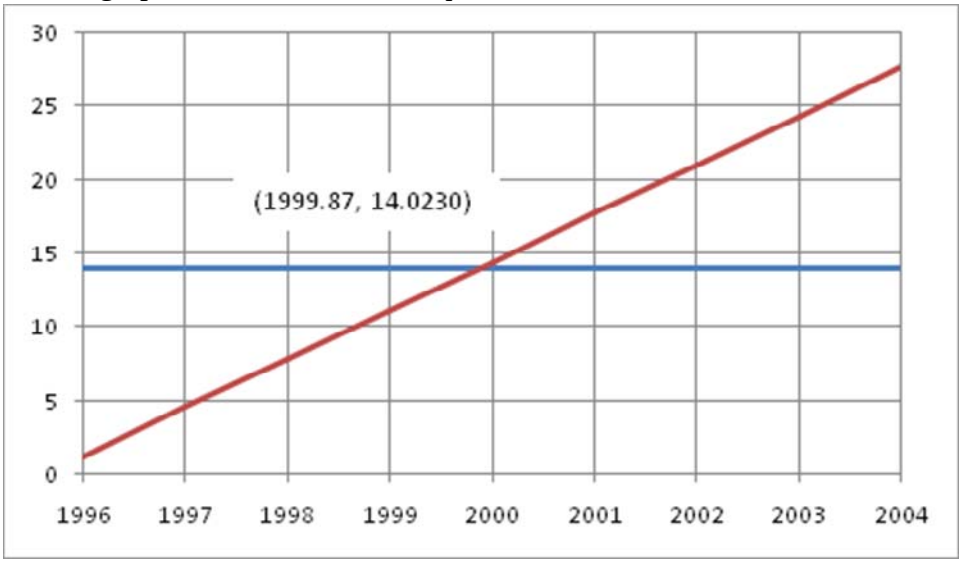
You will solve this problem using your birthdate in place of xxxx. For instance, if your birthday was February 30 you would be finding in what year were there 14.0230 million accounts.

1. Solve this problem algebraically on paper. Open Word (or another word processing program) and copy and paste the appropriate problem statement. Once you have listed all of the steps, open Mathtype from within Word (or another word processing program) by selecting the Mathtype menu item. Use Mathtype to show your steps. Your steps should be something like mine below:

$$14.0230 = 3.303t - 6591.560$$
$$14.0230 + 6591.560 = 3.303t$$
$$6605.583 = 3.303t$$
$$\frac{6605.583}{3.303} = \frac{3.303t}{3.303}$$
$$1999.87 \approx t$$

   To align the steps at the = sign, from within Mathtype select Format / Align at =.

2. Now we want to verify the solution to the equation above using the Method of Intersection. Open Excel and graph both sides of the equation above in a window that includes the solution. Include a scale that makes it obvious that the graphical solution matches the algebraic solution. For the equation above, the graph below would be adequate:




3. Make sure the problem statement above, your algebraic solution, your graphical solution and your name is in the document. Save it as an rtf file.