Relax. You have done problems like these before. Even if these problems look a bit different, just do what you can. If you're not sure of something, please ask! You may use your calculator. Please show all of your work and write down as many steps as you can. Don't spend too much time on any one problem. Please leave the following grading key blank for me to use. Do well. And remember, ask me if you're not sure about something.

Problems	1	2	3	4	Total		Grade
Points						%	
Out of	16	16	6	12	50		

1. When I first signed up for my Gmail account, the storage space was 2700 megabytes. The storage has grown 150 megabytes per year.

   (a) Identify and name the variables in the story and state their units.

   (b) Which variable is independent and which is dependent?

   (c) Make a table showing the storage space of my Gmail account after 2 years, 5 years, and 10 years.

   (d) Is the function increasing or decreasing?

2. The table shows the cost for hiring a jazz band for my wedding reception last summer.

| M	30	60	120	180
C	250	300	500	1000

In the table, M = number of minutes played and C = total cost of band (\$).

(a) What is the cost for hiring a band to play for 120 minutes?
    Don't forget the units.

(b) Approximately what is the cost for hiring the band to play for 150 minutes?

(c) Draw a graph illustrating this information. *Be sure your axes are labeled and evenly scaled. Plot the points given and sketch in a smooth line or curve connecting them.*
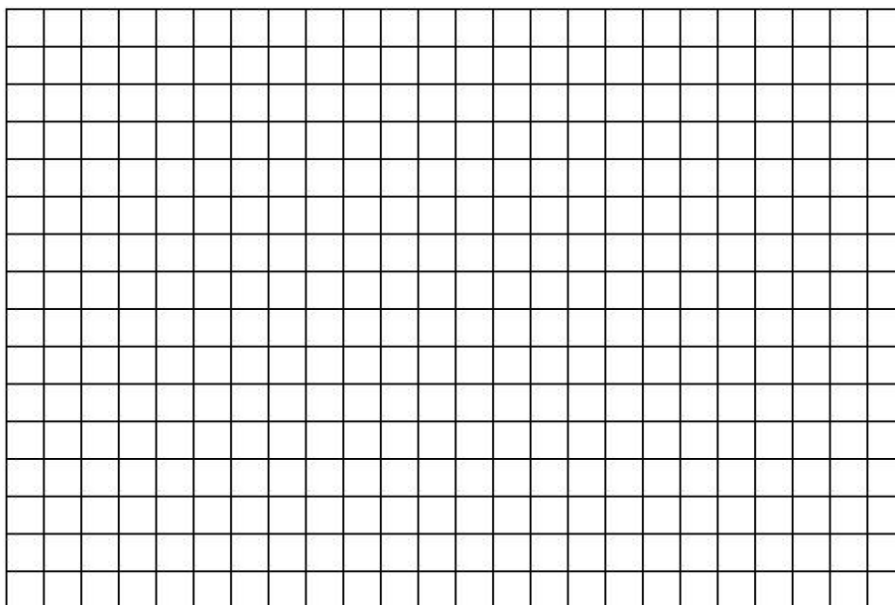
(d) Does your answer to part b agree with your graph? (Yes or no) If no, what would a better answer be?

3. The graph below shows the position of the Leona Lewis song "Bleeding Love" on the ARC Weekly Top 40 Countdown. The song entered the countdown on March 1, 2008.

Chart Position
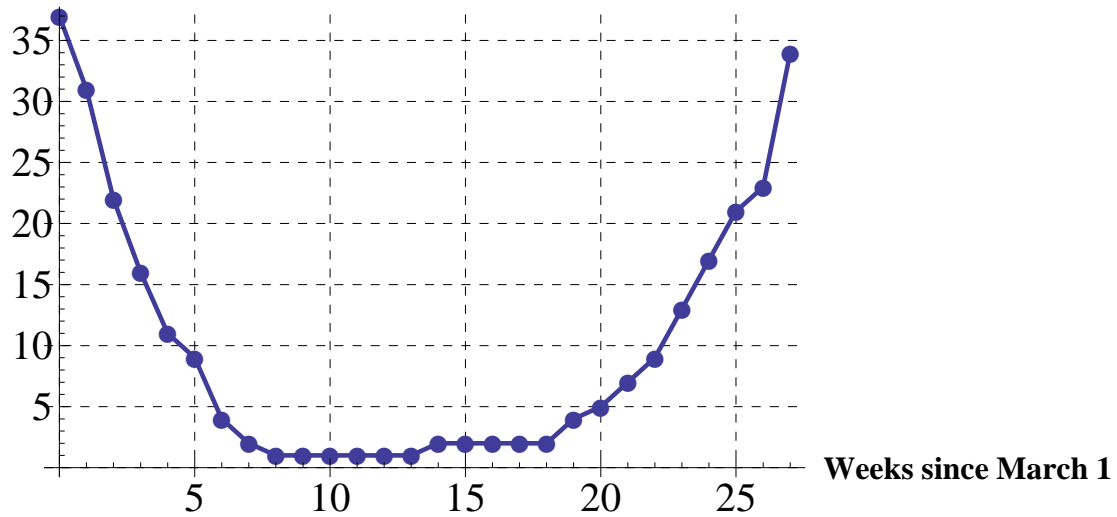
(a) After five weeks on the chart, what was the approximate ranking of the song?

(b) For approximately how long was the song ranked in the top ten?

4. The world record for the 100-meter track and field was set by Usain Bolt of Jamaica in Beijing 2008. He ran 100 meters in 9.69 seconds.

   (a) Convert his time into (decimal) minutes.

   (b) His speed was approximately 10.32 meters/second, as you can check. How fast is that in miles per hour? *Use 1 meter = 3.28 feet and 1 mile = 5,280 feet.*