1

Name:

36 pts. Look at **Bond movies 2009.xlsx**. You will see that this is a excel spreadsheet of the 22 James Bond movies (what a surprise subject for this class!).

Indicated in this are the lead actor playing the hero (oo7 Actor), the director of the movie, the actor playing M and several columns of data. One piece of information is the revenue this movie generated at the time of its premier. Another piece of information is the cost of producing the movie at the time of its premier. A final factor is the interest adjusted factor of the cost of money. Please remember that a dollar today is worth less than a dollar in previous years. The inflation factor resolves this.

1. We need to calculate some new columns. Again this is mathematics a college student should be able to deal with. The first is inflation adjusted revenue. This is the inflation factor multiplied by the revenue at the time of release. Designate this column as **present revenue.**
2. In addition, we need inflation adjusted cost as another column. This is the inflation factor multiplied by the cost of production at time of release. Designate this column as **present cost**.
3. Profit is the difference between the first column calculated above in A and the second calculation calculated in B. Calculate in a new column the profit for each of these movies using the columns created just above. Designate this column as **profitability**

We are about to use Pivot Tables

1. Using the insert tab, insert a new pivot table. We want to find the total profitability (the column calculated in C) of the movies pertaining to all the directors (Terrence Young, Etc). Set directors for row values. Profitability is the value used.
2. We also need the average profitability per picture for each director as each director dealt with a different number of Bond movies. Director is already in row values. Now, you already have calculated the sum of profitability above in part D. In the pivot table under values, set the system so that it also shows the average profitability for each movie by each director. Remember, we are looking at average as a statistic for the second inclusion of profitability and average is one of the options of value field settings. When done, each director should display a total and average profitability associated with him.
3. Format the numbers. Add commas to separate and set both numeric columns as integer
4. Order the directors so that the director with the highest average profitability is shown first, the one with the lowest average profitability is shown last.
5. You are allowed to group columns in pivot tables just as you can in a regular column on a spread sheet. While we have two calculations going, group the first, total profitability, as calculated in part D so that we can hide and/or show it as needed.
6. Create a pivot chart for this pivot table. Do not be surprised here. If all goes well, both a red bar and blue bar should appear for each element of the graph. The red is what we would be concentrating on if this was a real-life problem.

Save this workbook to your disk with your name as part of the name of the file and that this is problem 1 about James Bond. Send this as an attachment by Email to 777rauer@voicenet.com

2

21pts. As you may be aware, part-time instruction at CCP is very lucrative and with this money your instructor has been able to acquire quite an art collection. Below I’ve listed my painting collection.

|  |  |  |
| --- | --- | --- |
| Artist | Name Of work | Appraised Value |
| Van Gogh | Starry Nights | 1050000 |
| Rousseau | Hungry Lion | 1653200 |
| Van Gogh | Field Of Poppies | 375000 |
| Diego Rivera | Flower Seller | 525000 |
| Manet | On the Balcony | 839000 |
| Andy Warhol | Shot Orange Marilyn | 847000 |
| Rousseau | Snake Charmer | 1505000 |
| Manet | On the Beach | 1050000 |

You can see the author, the work and the appraised value. I need to calculate the insurance costs for my collection. Perhaps, you could help. To start this, enter my collection into a new excel spreadsheet.

Insurance is not cheap and it’s made up of several parts which you’ll have to keep track of.

1. First, calculate the average appraised value of the 8 works of art.
2. Next, calculate the maximum value of any art work in my collection. Do this by formula – you know there is a function that calculates the max of a range. It's always possible that I may get a raise and buy more art.
3. My insurance company charges me in two steps. The first step is to charge me 5% of the average value of the collection – what you calculated in A. Do this calculation.
4. The second step is to charge me 2.1% of the amount between the max and average. (hint: B-A) Again, the average was calculated in A, the max in B. Do this calculation
5. Total insurance cost is part C added to Part D. Resolve this on your spread
6. Create a bar chart (you might call it a column chart) of my works of art and attach this to the spreadsheet
7. Now, if you did this right, some decimal places have cropped up in the spreadsheet. Format all the numbers to 2 decimal places.

Save this file using your name and the fact that this is problem 2. For example, if it was me, it would be: Marc Rauer Art Works Problem 2. If I wanted to be humorous, I could create a name of parttime.teaching.pays.well,xlsx. Send this to **777rauer@voicenet.com** as an attachment.

3

36 Pts. Your instructor during the 1990's generally was teaching on Thursday nights and never watched one of TV's most famous series. He doesn’t do this night of teaching anymore but he was re-introduced to this series he never watched by his physical exercise trainer, Rob, who happens to have a photographic memory per this series (as well as being a fabulous trainer). Of course, we are talking about Seinfeld. This series ran on NBC from 1989 through 1998.

Your instructor has been rectifying this omission in his knowledge. To that end, take a look at the **Seinfeld.xlsx** file. Here you will see a list of every Seinfeld episode.

1. Set the data of sheet1 to the new table construct as shown in class. Now, through the use of the table and its properties of what is called filtering, indicate in alphabetic order all of ElaineBenes' employers who were credited in this show

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We need to add some mathematics on this spreadsheet: mathematics that you should be able to do given that this is a college class. Notice that there is a year indicated. In 1989, the country's population was 247 million. We need to work on an approximation to calculate US population (in millions) in a new column. Here's what I want you to do.

1. Create a formula that determines the number of years that are offset from 1989, 1989 is 0 years offset. 1995 is 6 years offset. Take this offset number, multiply by 3 and add to 247. Here's some examples: 1991 is 2 years offset (1991-1989), 2 \*3 = 6 + 247 = 253. 1995 is 6 years offset (1995-1989), 6\*3 = 18+247 = 265. You should be able to create a formula that you can apply throughout this new column to indicate approximate US population for the year indicated.
2. Now, using the column created above pertaining to US Population, calculate the number of Americans watching this show on an episode by episode level. You will notice that there is a column designated as population percentage. Multiple this column as a percentage against the approximate US population that you calculated above.
3. Use the table properties as discussed in class to display the table showing most watched episodes down to least watched. We are talking sorting here.
4. The system has created a default format which is what you are using. Format this table so that it no longer looks like the default format.
5. Again using table properties as shown in class, what was the average number of viewers for the series throughout the years. (Hint: total row in table design should be a start to answering this)
6. Using what you did above, what was the average number of viewers for those episodes where Elaine's employer is J Peterman Catalog. You are to do this through this spreadsheet using the filter and total line property as shown in class. This is how you will leave this spreadsheet for me to mark. Any other changes are sheet insertions.

The next 5 parts deal with two pivot tables. In dealing with this, let the program create a new sheet for each pivot table.

1. Create a pivot table using this Seinfeld data. We are going to do a one dimensional pivot table. Show the total population (summing of this is defaulted) that watched shows for each of Elaine's Employers credited.
2. Sort this so we see the highest to the lowest.
3. Show a bar (or column) graph of this.
4. Also, set the format to two decimal points.
5. Now, we want to run another pivot table on another sheet. Return to the underlying sheet of data and create another pivot table. Here we want to show a two dimensional pivot table.
6. Indicate the average number of viewers (you are to indicate average in the value field settings of population once put into the values box as was demonstrated in class) with the directors indicated in rows and Elaine's Employers indicated in column headers.

Save this workbook to your disk with your name as part of the name of the file and that this is problem 3. You can also add that this is about Seinfeld, if you like. Send this as an attachment by Email to **777rauer@voicenet.com**

Monday and Tuesday: Apr 30 and May 1

You should have 3 files per the 3 questions of the test. Save them first onto your machine or perhaps on a flash memory device. You have 2 ways of sending. The best would be to Email these to **777rauer@voicenet.com** as an attachment making sure to CC yourself at an Email account that you deal with regularly.

Your Email should have a subject similar to something like Marc Rauer Prob 3 Seinfeld, if I was doing this test. Prominently displaying your name is necessary if your Email address is obscure and your name not readily known.

The Carbon copy is for your protection. If I should fail to receive your Email, or I can’t open it, I will request you to send this Email again.

A second way is through flash memory. I will bring my own flash memory device(s) but save this yourself to your own flash memory and send me an Email that we did this.

Before sending, and before closing your Excel spreadsheet, make sure the save to your disk is not corrupted. In addition, please remember that once your machine is closed down, your files are gone if you saved any files on your machine.