# CS-150L Computing for Business Students *Midterm Exam Review*

Instructor:

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7/7/2010

#### Excel Exam: Next week

- During your regular lab class.
- Must use Lab Windows XP computer with Excel 2007

I *will* check ITS internet usage logs for DSH 141 at the end of the week.

This does not include layer 3 information (user data packets), but does include IP addresses.



## **Quiz: Weighted Average**

	А	В	С	D	E
1	Assignment	Points	Travis	Evan	Marie
2	Homework 1	20	100%	95%	85%
3	Homework 2	25	100%	90%	95%
4	Homework 3	30	100%	92%	75%
5	Final Project	130	85%	91%	98%
6	Grade		<b>90%</b>	<b>91%</b>	<b>93%</b>

Which equation can be *filled right* from cell C6, to correctly calculate the weighted average in cells C6:E6?

- a) =(\$C\$2\*B2+\$C\$3\*B3+\$C\$4\*B4+\$C\$5\*B5)/SUM(\$B\$2:\$B\$5)
- b) =(C2\*\$B\$2+C3\*\$B\$3+C4\*\$B\$4+C5\*\$B\$5)/SUM(\$B\$2:\$B\$5)
- c) =(\$C\$2\*B2+\$C\$3\*B3+\$C\$4\*B4+\$C\$5\*B5)/SUM(B2:B5)
- d) =AVERAGE(C2:C5)
- e) =AVERAGE(C2:C5)/SUM(B2:B5)

## Quiz: Weighted Average Again

	А	В	С	D	Е
				Midterm	Final
1	Name	Lab 1	Lab 2	Exam	Grade
2	Ori	100%	95%	91%	<b>94%</b>
7					
8	Each Lab Weight:	10			
9	Midterm Weight:	20			

- Enter an equation calculating Ori's final grade This equation must be entered so that it can be filled down to correctly calculate the grades in E4:E6. The equation MUST NOT use any constants.
- a) = (B2\*B8 + C2\*B8 + D2\*B9) / (B88 + B88 + B89)
- b) = (B2\*B8 + C2\*B8 + D2\*B9) / (2\*B8 + B9)
- C) = (B2\*\$B\$8 + C2\*\$B\$8 + D2\*\$B\$9) / 40
- d) = (B2 + C2 + 2\*D2) / 4

#### Scenario: Concession Stand

A concession stand at the Albuquerque Bio Park sells snow cones for \$1.00 each, hot pretzels for \$1.50 each and caramel apples for \$2.00 each.

Monday was sunny, and the stand sold 210 snow cones, 55 hot pretzels and 105 caramel apples.

On Tuesday, the sky was cloudy and the stand sold 85 snow cones, 165 hot pretzels and 100 caramel apples.

On Wednesday it rained and the stand sold 7 snow cones, 87 hot pretzels and 25 caramel apples.

#### **Concession Stand: Words to Spreadsheet**

	Α	В	С	D	Е
1				Items Solo	b
		Unit	Sunny	Cloudy	Rainy
2		Price	Monday	Tuesday	Wednesday
3	Snow Cones	\$ 1.00	210	165	5
4	Hot Pretzels	\$ 1.50	85	165	100
5	Carmel Apples	\$ 2.00	7	87	25
6	Total Ite	ms Sold			
7	Average Price of Ite	ms Sold			

- The background of each cell of your table must match the figure.
- The *horizontal* and *vertical alignment* of the text in your table must match the figure.
- Cells that are *Merged* and formatted with *Wrap Text* must match the figure.
- Cell **boarders** must match the figure.

## **Concession Stand: Estimate**

	A	В	С	D	E
1				Items Solo	d
		Unit	Sunny	Cloudy	Rainy
2		Price	Monday	Tuesday	Wednesday
3	Snow Cones	\$ 1.00	210	165	5
4	Hot Pretzels	\$ 1.50	85	165	100
5	Carmel Apples	\$ 2.00	7	87	25
6	Total Ite	ms Sold			
7	Average Price of Ite	ms Sold			

- If an equal number of the three items were sold, then the average price of a sale would be \$1.50.
- On Monday, the average price of an item sold will be the lowest.
- On Tuesday, the average will be higher than on Monday, but still below \$1.50 since more \$1.00 items were sold than \$2.00 items.
- On Wednesday, the average price of an item sold will be above \$1.50.

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## **Quiz: Total Items Sold**

	A	В	С	D	E
1				Items Solo	b
		Unit	Sunny	Cloudy	Rainy
2		Price	Monday	Tuesday	Wednesday
3	Snow Cones	\$ 1.00	210	165	5
4	Hot Pretzels	\$ 1.50	85	165	100
5	Carmel Apples	\$ 2.00	7	87	25
6	Total Ite	ms Sold			
7	Average Price of Ite	ms Sold			

What equation should be entered in cell C6?

- a) =sum(C3:C5)
- **b)** =sum(\$C\$3:\$C\$5)
- **c)** =sum(C3:E3)
- d) =sum(\$C3:\$E3)

e) =sum(\$C\$3:\$E\$3)

## **Concession Stand: Total Items Sold**

	A	В	С	D	E
1				Items Solo	d
		Unit	Sunny	Cloudy	Rainy
2		Price	Monday	Tuesday	Wednesday
3	Snow Cones	\$ 1.00	210	165	5
4	Hot Pretzels	\$ 1.50	85	165	100
5	Carmel Apples	\$ 2.00	7	87	25
6	Total Ite	ms So <mark>ld</mark>	=sum( <mark>C3</mark> :	C5)	
7	Average Price of Ite	ms Sold			

- In cell C6, enter an Excel equation that calculates the indicated value.
- This equation must be entered so that it can be filled right to correctly calculate the values in D6:E6.
- The equation MUST NOT use any constants.

## Copy the Equation as Text



Copy the equation used in **C6** as text into **F6**. In order to receive any credit for this part, your equation must appear with all the cell references used in C6 printed and visible in F6.

## **Concession Stand: Average Price**

	A	В	С	D	E
1				Items Solo	d
		Unit	Sunny	Cloudy	Rainy
2		Price	Monday	Tuesday	Wednesday
3	Snow Cones	\$ 1.00	210	165	5
4	Hot Pretzels	\$ 1.50	85	165	100
5	Carmel Apples	\$ 2.00	7	87	25
6	Total Ite	ms Sold	302	417	130
7	Average Price of Ite	ms Sold			

- The Average Price of an Item on a particular day is a Weighted Average.
- What is the weight of each item?
- What is the total weight?

# Quiz: Average Price

	Δ	R	C	П	F
	A	D	C	D	<b>L</b>
1				Items Sol	d
		Unit	Sunny	Cloudy	Rainy
2		Price	Monday	Tuesday	Wednesday
3	Snow Cones	\$ 1.00	210	165	5
4	Hot Pretzels	\$ 1.50	85	165	100
5	Carmel Apples	\$ 2.00	7	87	25
6	Total Ite	ms Sold	302	417	130
7	Average Price of Ite	ms Sold	=		

What equation should go in C7?

- a) =(\$B\$3\*\$C\$3+\$B\$4\*\$C\$4+\$B\$5\*\$C\$5)/\$C\$6

- b) =(B3\*\$C\$3+B4\*\$C\$4+B5\*\$C\$5)/\$C\$6
- c) = (B3\*C3+B4\*C4+B5\*C5)/C6
- d) =(\$B\$3\*C3+\$B\$4\*C4+\$B\$5\*C5)/C6
- e) = (B3\*C3+B4\*C4+B5\*C5)/C6
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## **Concession Stand: Average Price**

	Α	В	С	D	E	
1				Items Solo	b	
		Unit	Sunny	Cloudy	Rainy	
2		Price	Monday	Tuesday	Wednesday	
3	Snow Cones	\$ 1.00	210	165	5	
4	Hot Pretzels	\$ 1.50	85	165	100	
5	Carmel Apples	\$ 2.00	7	87	25	
6	Total Ite	ms Sold	302	417	130	SU
7	Average Drice of Ite				1 CDC2*C2)/C	10

- 7 Average Price of Items Sold =(**\$B\$3\*C3+\$B\$3\*C3+\$B\$3\*C3)/C6** 
  - In cell C7, enter an Excel equation that calculates the indicated value.
  - This equation must be entered so that it can be filled right to correctly calculate the values in D7:E7.
  - The equation MUST NOT use any constants.

#### **3D Clustered Column Chart**



Three data series: Snow Cones, Hot Pretzels, Carmel Apples

Three Clusters: Monday, Tuesday, Wednesday

#### Quiz:

Format Axis	
Patterns Scale Font Number Alignment	100% 🖷
Value (Z) axis scale	
Auto	
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Ma <u>x</u> imum:	75%
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Minor unit:	
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<u>C</u> rosses at: 0.5	50%
Display <u>u</u> nits: None Show display units label on chart	Ender Bonzo

What settings were used in the chart:

- a) Minimum=0.0, Maximum=1.0, Major Unit=0.1
- b) Minimum=0.1, Maximum=0.25, Major Unit=0.25
- c) Minimum=0.5, Maximum=1.0, Major Unit=0.5
- d) Minimum=0.5, Maximum=1.0, Major Unit=0.25
- e) Minimum=0.1, Maximum=1.0, Major Unit=0.5

## **Quiz: Chart Comparison**

- Which of these two stocks received the higher rate of return during the ten year period from 1998 through 2008?
- a) The one on the top.
- b) The one on the bottom.
- c) They are both about the same.

#### Stock Share Price at close of first Market day of year.





### **Chart Comparison**



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## Problems with Fill Colors on a Chart



In a *Cluster Column Chart*, using a different color for each series is great *except when*...

- 1) The chart is printed on a black-and-white printer.
- 2) The person viewing the chart is color blind.



#### **Chart Pattern Fills**

Pattern fills work best when color is not available.



## Chart Pattern Fills: Procedure Outline

- 1. Create a chart.
- 2. Select **one series** by clicking on a pie slice or bar of that series. If you want to change the pattern of only one data point in the series, then click a second time on that slice or bar.
- Open the Visual Basic Editor. This can be done by pressing ALT+F11 or by selecting Visual Basic from the Developer tab.
- From the Visual Basic Editor, open the *Immediate Window* by pressing *CTRL+G* or by selecting "Immediate Window" from the Visual Basic Editor "View" menu.
- 5. In the immediate window, enter the following command: selection.fill.patterned(*n*)

#### **Excel's Developer Tab**

By default, Excel's Developer Tab is not shown in the Ribbon.



#### **Chart Pattern Fills: Select One Series**

Select **one series** by clicking on a pie slice or bar of that series. If you want to change the pattern of only one data point in the series, then click a second time on that slice or bar.



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#### **Chart Pattern Fills: Visual Basic Editor**

#### Open the Visual Basic Editor. This can be done by pressing ALT+F11 or by selecting Visual Basic from the Developer

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### Chart Pattern Fills: Immediate Window

From the Visual Basic Editor, open the *Immediate Window* by pressing *CTRL+G* or by selecting "Immediate Window" from the Visual Basic Editor "View" menu.

Microsoft Visual Basic - Book1
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#### selection.fill.patterned(n)

In the immediate window, enter the following command: selection.fill.patterned(25)



Different values of *n* give different patterns.

#### Time

Study

- Three Lab Instructors took the exam:
  - One finished in 15 minutes.
  - Two finished in 20 minutes.
- Given enough time, any intelligent person can figure out how to reproduce the graphs and other formatting.



- Some people, even when they study, need more time.
- If you are such a person, make arrangements BEFORE the final.
- Best to document your disability, then you can use UNM Accessibility Services.