CSE 2111 Midterm Review Practice

SUM/AVERAGE

1. Write a formula in cell Summary!B3, which can be copied down and across to calculate the average score for each quiz according to different classes.

	A	B	C	D	E	F
1			Quiz Score			
2	Student Name	Class Num	1	2	3	4
3	Gillian	A	89	0	83	92
4	Mia	B	78	67	85	89
5	Jessica	B	95	87	91	93
6	Hailey	C	87	88	91	87
7	Harry	C	78	76	82	90

Score

	A	B	C	D	E
1	Average Score for classes				
2	Class	1	2	3	4
3	A	89	0	83	92
4	B	86.5	77	88	91
5	C	82.5	82	86.5	88.5

Summary

=AVERAGEIF(Score!$B$3:$B$7,$A3,Score!C$3:C$7)

- How to use SUM/AVERAGE (, :)
- Difference between AVERAGE, AVERAGEIF, AVERAGEIFS (Same with SUM)
- When to use “” (words but not Boolean)
- When to use AVERAGE and when to use SUM/#

ROUND

2.1 Round 12345678 to thousands

12346000

2.2 Round C4 to the nearest tenth of a point.

=ROUND(C4,1)

2.3 =ROUND(123456, -3)

123000

2.4 =ROUND(-123456,-3)

-123000

2.5 =ROUND(-123456.123456,3)

-123456.123

FINANCIAL FUNCTION

3.1 ABC Inc. got a loan of $300,000 from the bank who offered 12% annual rate of interest compounded quarterly. It plans to make quarterly payments of $20,000. Write a formula to determine the number of years that ABC Inc. needs to pay off its loan.

3.2 ABC Inc. got a loan of $300,000 with 20% down payment from the bank who offered 12% annual rate of interest compounded monthly. It plans to pay off the loan in 5 years. Write a formula to determine the quarterly payment.

3.3 ABC Inc. got a loan of $300,000 with 20% down payment from the bank. It plans to pay off the loan in 5 years with quarterly payment of $15,000. Write a formula to determine the annual rate of interest provided by bank.

3.1 =NPER(12%/4,-20000,300000,0,0)/4

3.2 =PMT(12%/12,5*12,300000*0.8,0,0)*3

3.3 =RATE(5*4,-15000,300000*0.8,0,0)*4

- Financial Function, when it's positive, when it negative
- Monthly, quarterly, yearly

BOOLEAN

4.1 Write a formula in cell D2 to determine (T/F) if the student passed the exam. The student passed the exam if his/her score is greater or equal to 85.

	A	B	C	D	E
1	Name	Class	Score	Pass	Next Step
2	Cecilia	B	87	TRUE	Break
3	Jacob	A	92	TRUE	Break
4	Susan	B	84	FALSE	Study
5	Lynn	A	82	FALSE	Study

4.2 Write a formula in cell E2 to determine the next step for students. If the student passed the exam, he/she can take a break. If not, he/she need to study.

	A	B	C	D	E
1	Name	Class	Score	Pass	Next Step
2	Cecilia	B	87	TRUE	Break
3	Jacob	A	92	TRUE	Break
4	Susan	B	84	FALSE	Study
5	Lynn	A	82	FALSE	Study

4.3 Write a formula to show (T/F) if all students passed the exam

4.4 Write a formula to show (T/F) if at least one student passed the exam

4.5 Write a formula to show (T/F) if none of student passed the exam

4.6 Write a formula to show (T/F) if only students in Class A passed the exam

4.1 =C2>85

4.2 =IF(D2,"Break","Study")

4.3 =AND(D2:D5)

4.4 =OR(D2:D5)

4.5 =NOT(OR(D2:D5))

4.6 =AND(OR(D3,D5),NOT(OR(D2,D4)))

VLOOKUP/HLOOKUP

	A	B	C	D	E	F
1	Name	Class	Score	Pass	Result	Instructor
2	Cecilia	3241	87	TRUE	B+	Renee
3	Jacob	4232	92	TRUE	A	Zoey
4	Susan	3241	84	FALSE	B	Renee
5	Lynn	4232	82	FALSE	B	Zoey

Students

	A	B	C	D
1	Class	3241	4232	3500
2	Intructor	Renee	Zoey	Doris

Instructor

	A	B
1	Score	Result
2	80	B
3	85	B+
4	90	A
5	95	A+

Result

5.1 Write a formula in Students!E2, which can be copied down to determine the result according to the student's score.

5.2 Write a formula in Students!F2, which can be copied down to determine the instructor for the class.

5.1 =VLOOKUP(C2,Result!$A$2:$B$5,2,TRUE)

5.2 =HLOOKUP(B2,Instructor!$B$1:$C$2,2,FALSE)