

How many questions did you complete (a completed question means that all the sub parts were done)? Write your answer as a fraction of the total number of questions **on the very top of your assignment: Example 10/17**

Please answer all questions. Remember this assignment is worth 15/4% and is your second assignment for the course. All statistical computing is to be done in **R**, please note that **MS**=Mendenhall and Sincich, *STATISTICS for science and engineering* 6th edition.

Use RMD and then knit into a HTML. Upload the latest addition of both files to CANVAS before the due date.

**PLEASE NOTE: IF THERE IS NO REQUIREMENT TO USE R THEN DON'T USE IT.**

Place the following files on CANVAS

1. RMD document
2. HTML document

All mathematical notation should be done in Latex inside R markdown.

**ALL WORKING MUST BE SHOWN IN ORDER TO GET THE FULL MARK VALUE!!**

1. [3 marks] MS 3.36 pg 105-106
2. [3 marks] MS 3.52 - pg 111
3. [1 marks] MS Theorem 3.1 - pg 113 Prove the theorem in your own words.
4. [1 marks] MS Theorem 3.2 - pg 114 Prove the theorem in your own words.

5. [1 marks] MS Theorem 3.3 - pg 116 Prove the theorem in your own words.
6. [1 marks] MS Theorem 3.4 - pg 117 Prove the theorem in your own words.
7. [3 marks] MS 4.2 - pg 138
8. [4 marks] MS 4.12 - pg 143
9. [4 marks] MS 4.34 - pg 154
10. [2 marks] MS 4.46 - pg 158
11. [2 marks] MS 4.54 - pg 162
12. [2 marks] MS 4.66 - pg 168
13. [3 marks] MS 4.78 - pg 173
14. [4 marks] MS 5.2 - pg 191
15. [3 marks] MS 5.10 - pg 196
16. [3 marks] MS 5.36 - pg 205
17. [5 marks] MS 5.38- pg 205