

1. Linear Models

- If a given situation is best modeled by a linear function, construct that model. (p. 47 Example 7, p. 48 Example 9, Fall 2013 Test 1 # 1)
- If a given situation will not be modeled well by a linear function, explain why. (Fall 2013 Test 1 # 1)

2. Limits

- Compute limits numerically. (p. 103 Example 1, p. 105 Example 2, Fall 2013 Test 1 # 2a)
- Compute limits graphically. (p. 103 Example 1, p. 105 Example 2, Fall 2013 Test 1 # 2b)
- Compute limits using continuity. (Fall 2013 Test 1 # 2c)

3. Derivatives

- Compute derivatives using the difference quotient. (p. 138 Examples 1 – 4, Fall 2013 Test 1 # 3b)
- Compute derivatives using the power and sum/difference rules. (p. 153 Examples 5 – 7, Fall 2013 Test 1 # 3a)

4. Higher Order Derivatives

- Understand derivative as the instantaneous rate of change of a quantity. (p. 181 Example 4, Fall 2013 Test 1 # 4)

Fall 2013 Test 1: <http://www.austinmohr.com/13fall060/test1sol.pdf>