

5. Rate of Change and Concavity

- Identify intervals of increase and decrease. (p. 204 Example 1–2)
- Identify relative extrema. (p. 204 Example 1–2)
- Identify intervals of concavity. (p. 217 Example 1–2, Fall 2013 Test 2 # 3)
- Identify inflection points. (p. 220 Example 3–4, Fall 2013 Test 2 # 3)

6. Asymptotes

- Identify vertical asymptotes algebraically. (p. 232 Example 1–2, Fall 2013 Test 2 # 2)
- Identify horizontal asymptotes algebraically. (p. 234 Example 3–4, Fall 2013 Test 2 # 2)
- Identify slant asymptotes algebraically. (You do not need to know polynomial division.) (p. 236 Example 6, Fall 2013 Test 2 # 2)

7. Abstract Optimization

- Identify global extrema on a closed, bounded domain. (p. 248 Example 1–2, Fall 2013 Test 2 # 1)
- Identify global extrema on an unbounded domain. (p. 250 Example 3, 6, Fall 2013 Test 2 # 1)

8. Applied Optimization

- Construct and optimize a function for a word problem. (The context will be simple arithmetic or geometry.) (p. 259 Example 1–2, Fall 2013 Test 2 # 4)

Fall 2013 Test 2: <http://www.austinmohr.com/13fall060/test2sol.pdf>