

MATH CAMP

Problem Set 5

1. Find  $\partial F / \partial x$ ,  $\partial^2 F / \partial x^2$ ,  $\partial F / \partial y$ , and  $\partial^2 F / \partial x \partial y$  for the functions listed in S&B 14.1, p. 302.
2. S&B 14.11, p. 318.
3. S&B 14.18, p. 322
4. S&B 14.19, p. 323
5. S&B 14.20, p. 323
6. S&B 17.1, p. 402. Find the critical points. Do not worry about classifying them as local max or min.
7. S&B 17.2, p. 402. Find the critical points. Do not worry about classifying them as local max or min.