

MAT 141
Problem Set #14

For your benefit only. Not to be handed in.

1. Apostol, section 4.19, # 9, 10, 13
2. Apostol, section 4.21 # 7, 21, 22, 28
3. Show that if $f(x)$ is convex on (c, d) , then $(-f)(x)$ is concave on the same interval. Prove that if $f''(x) \leq 0$ on (c, d) , then $f(x)$ is concave on the same interval.