

MATH 200(55): Homework 2

Due Wednesday, February 6

Problems: For full credit you need to show all the work leading to your solution. REMEMBER TO STAPLE. Homework may be updated by Thursday Jan 31, check for latest version.

3.1: 6, 12(b), 31 (remember $r = (x^2 + y^2 + z^2)^{1/2}$, simplifying hint: just calculate $\frac{\partial^2 V}{\partial x^2}$ and figure out $\frac{\partial^2 V}{\partial y^2}$ and $\frac{\partial^2 V}{\partial z^2}$ from symmetry)

3.2: 4, 10

3.3: 12, 22, 23, 39, 40

3.4: 4, 12, 25, 28