## Math 241 F1H: Problem Set 3

Due date: In class on Tuesday February 5.
To make things easier on the grader, I'm now giving each problem a uniform number.

1. §2.1: \#32.
2. §2.1: \#33.
3. Sketch the level curves and graphs for
(a) $3-x^{2}-y^{2}$
(b) $3 x^{2}-y^{2}+4$
4. §2.2: \#13(a).
5. Spend a little time playing with the quadric surfaces at
http://www.math.uiuc.edu/Courses/math241/quadrics/

Write a paragraph about something you learned doing so.
6. §2.2: \#19.
7. §2.2: \#20.
8. §2.2: \#30.
9. §2.3: \#2.
10. §2.3: \#8.
11. §2.3: \#14.

Note: This assignment is complete. No further problems will be assigned on Monday.

