

Math 241, Problem Set #4  
(due **in class** Fri., 10/4/13)

Stewart, section 10.6, problems 2, 4, 12, 22, 32, 34.

Stewart, section 10.7, problems 2, 6, 10, 28 (hint: use trig functions), 44, 60, 66, 72, 82.

Also:

- A. Show that for the helix  $\mathbf{h}(t) = \langle a \cos t, a \sin t, bt \rangle$ , the vector derivative makes a constant angle with the  $z$ -axis. What is this angle if  $a = 1$  and  $b = \sqrt{3}$ ?