Math 251

Workshop 12: Helpful parametrizations and a vector field

November 18, 2013

Due: November 20, 2013

1 Workshop 12: Helpful parametrizations and a vector field

- 1. Let A = (2,2) and let D = (4,6). Let B and C be the other two corners of the rectangle whose opposite corners are A and D. Draw a figure and label it clearly.
 - (a) Parametrize the piecewise linear path from *A* to *D* passing through *B*.
 - (b) Parametrize the piecewise linear path from *A* to *D* passing through *C*.

2. Draw the following vector fields on the back of this page. Make *big, beautiful* pictures. Each picture should include at least 10 vectors.

(a)
$$\vec{F} = \langle 1, 0 \rangle$$

(b)
$$\vec{G} = \langle 0, -2 \rangle$$

(c)
$$\vec{H} = \langle x, 0 \rangle$$

(d)
$$\vec{R} = \langle 0, x \rangle$$

(e)
$$\vec{S} = \langle x, y \rangle$$

(f)
$$\vec{T} = \langle -\nu, x \rangle$$