Homework o

# Math 105: Multivariable Calculus Fifth Lecture (2/11/13)

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http://www.williams.edu/Mathematics/sjmiller/public\_html/105/

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## Lines

Kayla's View



Thomas Eakins: Shad fishing at Gloucester on the Delaware River: 1881



Tron clip: http://www.youtube.com/watch?v=-30De9mgoDE&feature=related

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### Homework

#### Homework Assignment: Due Wednesday, 2/13/2013

Section 11.8: Question 1: Find the rectangular coordinates of the point with the given cylindrical coordinates.  $(1, \frac{\pi}{2}, 2)$ .

Section 11.8: Question 26: Describe the graph of the given equation:  $\rho = 5$ .

**Page 908: #2::** Find the largest possible domain for  $f(x, y) = \sqrt{x^2 + 2y^2}$ .

**Page 908: #4::** Find the largest possible domain for f(x, y) = 1/(x - y).

**Page 908: #5::** Find the largest possible domain for  $f(x, y) = (y - x^2)^{1/3}$ .

**Page 908: # 27::** Describe the graph of  $f(x, y) = \sqrt{4 - x^2 - y^2}$ .

**Page 908: #32::** Sketch level sets of  $f(x, y) = x^2 - y^2$ .