Math 141
Calculus I
Fall 2000, USC

QUIZ 7

Time: 10min

1. Find $D_x y$ by implicit differentiation: $9x^2 + 4y^2 = 36$.

2. Assuming that a soap bubble retains its spherical shape as it expands, how fast is its radius increasing when its radius is 3 inches if air is blown into it at a rate of 3 cubic inches a second?

   Each problem is worth 5 points.