

Name _____

Math 221, Quiz III, September 29, 2000

Circle your section:

382	Lu	8:50 TR	350 Birge
384	Ores	9:55 TR	215 Ingraham
385	Lu	11:00 TR	B337 Van Vleck
388	Raichev	12:05 TR	B129 Van Vleck
389	Raichev	1:20 TR	B317 Van Vleck
390	Givens	1:20 TR	B129 Van Vleck
391	Chakrabarti	2:25 TR	B317 Van Vleck
392	Givens	2:25 TR	B129 Van Vleck
393	Ores	3:30 TR	B317 Van Vleck
394	Chakrabarti	3:30 TR	B129 Van Vleck

I (a) (10 points) Find a formula for $\frac{dy}{dx}$ in terms of x and y , if x and y are related by the equation –

$$x^3 + y^3 = 3xy.$$

(b)(10 points) For x and y as in part (a), find a formula for $\frac{d^2y}{dx^2}$ in terms of x , y and $\frac{dy}{dx}$.