Math 221 Quiz 3

Name:_____ Score:_____

Instructions: You must show supporting work to receive full and partial credits. No text book, notes, formula sheets allowed.

1(5pts) Find a general solution to the equation: $xy^2\dfrac{dy}{dx} = x^3 + y^3$.

2(5pts) Verify the equation $(2xy + \sin x)dx + (x^2 + 3)dy = 0$ is exact. Then find a general solution to the equation.

END