KFUPM – Department of Mathematics and Statistics – Term 121

MATH 260

QUIZ # 2 Code 1 (Duration = 30 minutes)

NAME:_____

ID:_____ Section: _____

Exercise 1 (4 points)

Solve the differential equation $(x^2 + y^2)dx + 2x^2 dy = 0$

Exercise 2 (3 points)

Solve the differential equation $xy' + y = xy^2$

Exercise 3 (3 points)
Find an integrating factor that makes the differential equation $(x - y)dx + xdy = 0$ Exact and solve it.

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MATH 260

QUIZ # 2 Code 2 (Duration = 30 minutes)

NAME:_____

ID:_____ Section: _____

Exercise 1 (4 points)

Solve the differential equation $(x^2 + y^2)dx - 2x^2 dy = 0$

Exercise 2 (3 points)

Solve the differential equation $xy' - y = xy^2$

Exercise 3 (3 points)
Find an integrating factor that makes the differential equation $ydx + (y - x)dy = 0$
Exact and solve it.