KFUPM – Department of Mathematics and Statistics – Term 172 MATH 202 QUIZ # 1 Code 1 (Duration = 20 minutes)

NAME:	ID:	Section:

Exercise 1 (5 points)

Solve the differential equation $(3x^2y - 3x^2)dx - dy = 0$ and find all singular solutions if any.

Exercise 2 (5 points) Solve the differential equation $y^t - \sin(x)y = -\sin(x)$ (show all your steps)

KFUPM – Department of Mathematics and Statistics – Term 172 MATH 202 QUIZ # 1 Code 2 (Duration = 20 minutes)

NAME:	ID:	Section:

Exercise 1 (5 points)

Solve the differential equation $(3xy^2 - 3y^2)dy - dx = 0$ and find all singular solutions if any.

Exercise 2 (5 points) Solve the differential equation $y' + \cos(x) y = \cos x$ (show all your steps)