## KFUPM – Department of Mathematics and Statistics – Term 172 **MATH 202**

**QUIZ # 2 Code 1** (Duration = 20 minutes)

NAME:	ID:	Section:
Exercise 1 (5 points)		
Solve the differential equation	$(3x^2y - 3\cos(x))dx + (x^2 - 3\sin(y))dy$	= 0

Exercise 2 (5 points)

Transform the differential equation  $(x^2y - y^2x)dx + (x^3 - y^3)dy = 0$  to a separable equation (Do not solve the obtained separable equation)

## KFUPM – Department of Mathematics and Statistics – Term 172 **MATH 202**

**QUIZ** # 2 Code 2 (Duration = 20 minutes)

NAME:	ID:	_ Section:
Exercise 1 (5 points)		
Solve the differential equation	$(3xy^2 - \cos(y))dx + (3x^2y + x\sin(y))dy$	= 0

Exercise 2 (5 points)

Transform the differential equation  $(y^2x - x^2y)dx + (y^3 - x^3)dy = 0$  to a separable equation (<u>Do</u> not solve the obtained separable equation)