

Name:

ID:

Sec: 2 , 3 serial:

**MATH 202**

**Term 052**

**QUIZ 2 (form A)**

1) Determine whether the differential equation is separable or non-separable. (show your work)

(I)  $(e^x + e^{-x})y' - y^2 = 0$

(II)  $y'(xy - 2x + 4y - 8) = (xy + 3x - y - 3)$

(III)  $e^{xy} y dy = (1 + e^{-2x}) dx$

2) Solve the given linear differential equation (show all your work)  
(problem # 20 / page 65)

$$(x + 2)^2 y' = 5 - 8y - 4xy$$