York University

Faculty of Science and Engineering MATH 1090A. Problem Set #4 Posted November 22, 2011

Due: December 6, 2011; 2:00pm, in the course box

Annotation is required!

(5 MARKS/Each) Do the following problems from the text.

- 1. Section 6.6: Numbers 12, 13, 14, 17, 25, 28
- **2.** Prove by the method of eliminating \exists :

$$\vdash (\exists x)(A \land B) \rightarrow (\exists x)(A \rightarrow C \rightarrow B)$$

No other method is acceptable.

- **3. Section 8.3:** Numbers 2, 8
- **4.** Let ϕ be a predicate of arity 2. Prove or disprove:

$$\phi(x,y) \vdash \phi(y,x)$$

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