## 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 $\exists$ :
$\vdash(\exists x)(A \wedge B) \rightarrow(\exists x)(A \rightarrow C \rightarrow B)$
No other method is acceptable.
3. Section 8.3: Numbers 2, 8
4. Let $\phi$ be a predicate of arity 2 . Prove or disprove:
$\phi(x, y) \vdash \phi(y, x)$
