

York University  
Lassonde School of Engineering  
EECS  
MATH 1090A. Problem Set #4  
Posted November 20, 2015

**Due:** December 7, 2015; 2:00pm, in the course box

Annotation is required!

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

1. **Section 6.6:** Numbers 1, 17, 19, 22, 25, 28
2. Prove by the method of eliminating  $\exists$ :  
 $\vdash (\exists x)(A \wedge B) \rightarrow (\exists x)(A \vee C \rightarrow B)$   
**No other method is acceptable.**
3. **Section 8.3:** Numbers 3, 5
4. Let  $\phi$  be a predicate of arity 2. Prove or disprove:  
 $\phi(x, y) \vdash \phi(y, x)$