## Math 2283 - Introduction to Logic $_{Quiz\ \#6\ -\ 2012.09.05}$

Solutions

1. If we start with the	conditional statement $p$ –	$\rightarrow q$ , write the converse	, contrapositive and	l inverse statement	to the
conditional. Be sure to	o label each correctly.				

The converse is  $q \to p$ , the contrapositive is  $\sim q \to \sim p$ , and the inverse is  $\sim p \to \sim q$ .

## 2. What is the rule of detachment?

The rule of detachment states that if we know p is true, and  $p \to q$  is true, then we get also that q must be true.