## CPSC 101A, Spring 2004 Homework 1 Due: March 15, 2004

1. Derive a logical expression corresponding to the question mark columns and simplify the logical expression. Your final expression should have at most one *not* operator, at most two *and*, at most one *or* operators.

р	q	r	?	?	?
F	F	$\mathbf{F}$	$\mathbf{F}$	$\mathbf{F}$	$\mathbf{F}$
F	$\mathbf{F}$	Т	$\mathbf{F}$	Т	Т
F	Т	$\mathbf{F}$	$\mathbf{F}$	Т	$\mathbf{F}$
$\mathbf{F}$	Т	Т	$\mathbf{F}$	Т	$\mathbf{F}$
Т	$\mathbf{F}$	$\mathbf{F}$	$\mathbf{F}$	$\mathbf{F}$	$\mathbf{F}$
Т	$\mathbf{F}$	Т	Т	$\mathbf{F}$	Т
Т	Т	$\mathbf{F}$	Т	Т	Т
Т	Т	Т	Т	Т	Т