# Predicate Logic Phase 6 Tests

**Test 1 : Simple Quantifiers**

(a)

$\forall\, x\colon N \bullet x > 0$

(b)

$\exists\, y\colon N \bullet y = 0$

(c)

$\exists_1\, z\colon N \bullet z < 10$

**Test 2 : Multi Variable Quantifiers**

(a)

$\forall\, x, y\colon N \bullet x > y$

(b)

$\exists\, a, b\colon N \bullet a > 0 \wedge b > 0$

(c)

$\forall\, m, n, p\colon N \bullet m \geq n \wedge n \geq p$

**Test 3 : Nested Quantifiers**

(a)

$\forall\, x\colon N \bullet \exists\, y\colon N \bullet x > y$

(b)

$\exists\, x\colon N \bullet \forall\, y\colon N \bullet x \leq y$