SUBJECT:
DATE: / /

Proof of Φ_2 (wantp = 1 → p3...p5)

Base Case

wantp = 1 is false so Φ_2 is true

Inductive Step

Whenever we change wantp to equal 1 in the program, he must be within p3...p5. Whenever wantp != 1, Φ_2 is true

Therefore Φ_2 is true

With Φ_1 and Φ_2 both being true, Φ_3 is true by deduction Q is symmetrical to P and can be assumed to work w/ above proofs

Therefore Φ_3 is true

p3...p5 ↔ wantp = 1
q3...q5 ↔ wantq = -1