

# NC STATE UNIVERSITY

## MEMORANDUM

**TO:** Spring 2006 EGR 150 Students


**FROM:** Bill Fortney *BF*

**DATE:** 4/26/2006

**SUBJECT:** HW #5

---

### Question #1

A canal on level ground is 23 miles long, 21 ft deep and has a trapezoidal cross section  . The distance across the canal at the top is 35 ft and across the bottom is 15ft. If the canal gates are closed and the canal is filled with water, how long will it take to pump the canal dry if the pump can pump 625 gallons per minute?