

Exam I - Topical Outline Review

- A. The hydrologic cycle
 - what is it?
 - what makes it go?
- B. Hydrologic Abstractions
 - identify what they are
 - physical vs. systems approaches
- C. Water Budgets
 - an accounting of volumes moving through environment
 - check units and recall that volumes are $Q \cdot t$ and $A \cdot d$
- D. Hydrostatics
 - fluid properties & heads
 - manometers & tank pressure head distributions
- E. Precipitation
 - types and forms of precipitation
 - adjustment of precipitation data; filling in lost data
 - analysis of ppt. distribution; averages, polygon & isohyetal methods
- F. Hydrographs
 - streamflow, or discharge vs. time resulting from "effective" rainfall
 - UHG analysis; effective rain, or direct runoff corresponding to 1 unit depth over basin
 - linearity and superposition - used to create hydrographs from UHG.
- G. Evaporation & ET
 - net rate of water vapor transfer to atm.
 - evaporation and ET estimation methods
 - energy balance
 - mass transfer
 - evaporation pan