Pesticide Calculations Worksheet

1. How many acres are in a field that measures 385 feet long by 225 feet wide?
    Hint: one acre = 43,560 square ft.

2. How many acres can you spray with a full tank if the tank holds 1000 gallons, and you are spraying at 8 GPA ?

3. How many gallons of herbicide do you need to mix a full tank?
    Tank capacity = 100 gallons
    Spray volume = 12.5 GPA
    Product rate = 2 pints product per acre
    Tractor speed = 10 MPH
    Hint: first determine how many acres you can spray with a full tank
    Hint: there may be more information than you need.

4. How much 75W herbicide do you need to treat 1500 acres if the recommended application rate is 0.3 pounds active ingredient per acre?
    Hint: divide the amount you need (lbs. ai) by the percent in the product

5. How much 2E herbicide do you need to treat 1500 acres if the recommended application rate is 0.3 pounds active ingredient per acre?
    Hint: divide the amount you need (lbs ai) by the amount in the formulation (lbs/gal)

6. How many fluid ounces of wetting agent do you need for a 75 gallon tank if the herbicide label recommends adding a surfactant at 0.5% v/v?
    Hint: in the last step, convert gallons to ounces

7. You are spraying herbicide in 24" bands in rows that are 36" apart.   If your field is 2 acres, how many acres are actually treated?