| Floriculture CDE Problem |
| :---: |
| Solving Component |

Team Number _____          Score _____

*Each problem is worth 20 points*      ***Show all work for each problem***

## FFA CDE Team Event (Floriculture Scenario):

You are a wholesale greenhouse grower specializing in annual bedding plants and pot crops. Answer the following questions pertaining to this situation.

**Problem 1:** (10 point value)

You are growing geraniums on 25 benches that are 4'wide x 10' long. How many total square feet of bench space do you have devoted to growing these geraniums?

a. 40

b. 400

c. 1000

d. 4000

**Problem 1a:**   (10 point value)

Also if each geranium needs ½ square foot of growing space, how many geraniums are you growing in the total square space?

**Problem 2:**  (10 point value)

If each 2.8 cubic foot bag of potting media fills (50) 6 inch pots, how many bags of potting media will be needed to plant the geranium crop?

    a. 10

    b. 5

    c. 40

    d. 100

**Problem 2a:**  (10 point value)

If each bag cost $11.00 what is the total cost of potting soil needed?

**Problem 3:** (20 point value)

Excel 15-5-15 Cal-Mag is a water soluble fertilizer that is applied to a geranium and greenhouse crops to promote root development and maintain canopy growth?  You should use 8 oz of fertilizer in one gallon of concentrate through a fertilizer injector and use 2 gallons of concentrate a week.  The geranium crop will take 8 weeks to finish and a bag of fertilizer cost $31.00 per 25 pound bag.  What is the total cost of fertilizer used to grow this geranium crop?  (1 Pound = 16 oz)

a. $13.60

b. $8.16

c. $9.92

d. $4.49

**Problem 4:** (20 point value)

If each geranium cost $2.00 in total production costs and you want your net profit on the entire crop to be $1000, what would you need to sell each geranium for?

**Problem 5:** (20 point value)

The geranium crop will be watered from a drip irrigation system. Each emitter provides ½ gallon of water per hour. The system will run 30 minutes, 3 days a week. How much water will be used during the 8 week production cycle?

   a. 3000 gallons

   b. 1500 gallons

   c. 12000 gallons

   d. 1000 gallons