

2005 STATE FFA NURSERY/LANDSCAPE PROBLEM SOLVING

Student Name _____ Score _____

Chapter _____ Student Number _____

Directions: Choose the correct answer and write the letter for your answer in the blank.

- ___ 1. If no more than one half the total leaf surface should be removed and the recommended mowing height is 2 inches, the lawn should be mowed before the grass height reaches:
- a. 2 inches.
 - b. 4 inches.
 - c. 6 inches.
 - d. 8 inches.
- ___ 2. A nursery owner has a field 500 feet long and 500 feet wide. How many acres are in this field?
- a. 1.00
 - b. 5.74
 - c. 25.00
 - d. 43.56
- ___ 3. The general rule for pruning roots is 10" of circle diameter for each 1" of plant diameter. What diameter circle should be made for pruning the roots of a tree that has a 2 inch stem diameter?
- a. 2 inches
 - b. 10 inches
 - c. 20 inches
 - d. 25 inches
- ___ 4. A North Carolina plant grower recently received serious damage to many plants from a storm. Expenses to date are listed below:

Labor costs	\$ 4,000.00
Utility costs	2,000.00
Supplies and materials	14,000.00

An inventory showed that 4,000 plants could be sold. What would be the price per plant to cover the expenses listed above?

- a. \$1.00
- b. \$3.00
- c. \$4.00
- d. \$5.00

- ___ 5. If five gallons of water mixed with 2.75 ounces of liquid fungicide make a 2% solution, how many ounces of fungicide would be needed to make a 3% solution?
- 1.38
 - 4.13
 - 5.50
 - 7.75
- ___ 6. The recommended rate of nitrogen fertilizer for Centipedegrass lawn is $\frac{1}{2}$ pound per 1000 square feet. The 200 feet by 300 feet lot has a 2000 square feet home and a 1000 square feet driveway. How many pounds of nitrogen are needed?
- .5
 - 18.5
 - 20.3
 - 28.5
- ___ 7. Properly sharpened and balanced mower blades will reduce fuel use by 22%. The engine on a mower with dull blades uses 1 gallon of fuel per hour, and gasoline costs \$2.00 per gallon. How much will be saved on fuel if it takes 4 hours to mow the lawn?
- \$.22
 - \$1.34
 - \$1.76
 - \$8.00
- ___ 8. A garden center manager is having a 25% off sale on all bedding plant six packs priced at \$1.99 each. Including 7% N. C. sales tax, how much would a customer pay for 10 of the six packs?
- \$15.97
 - \$17.18
 - \$19.99
 - \$20.22
- ___ 9. If an ounce of flower seeds has 10,000 seeds with 90% germination rate, how many ounces of seeds should be purchased and sowed to produce 27,000 plants?
- .5
 - 2.0
 - 3.0
 - 7.5
- ___ 10. How many cubic yards of mulch should be purchased to cover an area 100 feet long and 6 feet wide with 3 inches of mulch?
- 6
 - 9
 - 12
 - 15