

1997 IOWA FFA
NURSERY/LANDSCAPE
CAREER DEVELOPMENT EVENT

NURSERY PROBLEM SOLVING
PHASE III

Choose the one best answer and record on your answer sheet.
50 points (10 points per question)

1. You pay laborers, who plant small trees, \$.08 per plant up to 800 plants per day. For all plants in excess of 800, you pay \$.09 per plant. Rebecca planted 917 trees. How much did she earn?
 - a) \$82.53
 - b) \$74.53
 - c) \$73.36
 - d) \$72.00
2. You planted 400 trees that cost \$880 to buy and plant. You spent \$350 per year for 4 years to maintain and care for the trees. During the 4 year period 37 of the trees died. How much do you have invested in each tree at the end of the 4 years?
 - a) \$6.28
 - b) \$5.70
 - c) \$3.39
 - d) \$3.08
3. You wish to apply 15 lbs of P_2O_5 per acre of land using 0-46-0 fertilizer. How many pounds of fertilizer will you need per acre?
 - a) 69
 - b) 46
 - c) 33
 - d) 15
4. The herbicide you wish to use on a bed of seedling nursery stock should be applied at a rate of 3 pounds per acre. The bed of seedling stock measures 312 ft. by 15 ft. How many ounces (16 ounces equals one pound) of herbicide should be applied to the bed of seedling nursery stock? (one acre equals 43,560 sq. ft.).
 - a) 3 ounces
 - b) 5 ounces
 - c) 9 ounces
 - d) 48 ounces
5. You sold 15 trees for \$87.00 each with a one-year warranty which covered the tree and planting. The trees cost you \$46.00 each and your labor costs for planting was \$7.00 per tree. Two of the trees died and you had to replace them free of charge. How much profit did you make from this sale?
 - a) \$1131
 - b) \$ 510
 - c) \$ 404
 - d) \$ 390

PHASE VIII - Nursery/Landscape Contest 1997

Assessment and Solution

Please darken the correct letter on the answer sheet provided.

Station #1

What is the correct size nursery pot of the plant material at this station?

- a. 1 gallon
- b. 2 gallon
- c. 3 gallon
- d. 5 gallon

Station #2

During an evaluation of this chain saw, the following problem was found

- a. loose chain
- b. chain too tight
- c. low on chain oil
- d. bar nut missing

Station #3

This weed eater is not running properly. What is the problem?

- a. the weed eater is nearly out of string
- b. there isn't any spark
- c. the weed eater engine needs an overhaul
- d. the weed eater is out of gas

Station #4

This tree needs to be tagged at the nursery. You have been given the task of measuring it. Using the caliper provided, what is the correct caliper size of the tree? (for a 2" caliper tree or smaller measure 6" up on the trunk)

- a. 1 1/2"
- b. 2"
- c. 1 3/4"
- d. 1"

Station #5

Miller Nursery has to plant a bed of New Guinea Impatiens. What conditions are best for these annuals?

- a. full sun
- b. full shade
- c. partial sun
- d. partial shade.

Station #6

You planted a 9' Arborvitae. You want to fertilize it with Ortho Fertilizer, how much do you use per tree?

- a. 1/2 cup
- b. 1 cup
- c. 1 1/2 cup
- d. 2 cups

Station #7

I went to Earl May to purchase a tree and Amy McDowell the Assistant Manager told me to use Up-start when planting the tree. How much water and how much product would I use to mix up the solution?

- a. 1 gal water with 6 T of Upstart
- b. 1 gal water with 4T of Upstart
- c. 2 gal water with 5T of Upstart
- d. 1/2 gal water with 4T of Upstart

Station #8

I have a 50# bag of fertilizer with a 20-20-4 ratio. How many pounds of N are contained in that 50# bag?

- a. 8 pounds
- b. 10 pounds
- c. 20 pounds
- d. 15 pounds

Station #9

You were sent back to the Nursery to get 5 landscaping timbers. What size timbers will you be getting?

- a. 4 x 4
- b. 6 x 4
- c. 6 x 6
- d. 8 x 6

Station #10

You were asked to spray non-selective (Round-up) on weeds around the school. How much product for a 1 1/2% solution in 3 gallons of water?

- a. 4 oz.
- b. 8 oz.
- c. 2 oz.
- d. 6 oz.

**FFA Nursery/Landscape Contest 1997
Phase IV; Identifying & Controlling
Plant Disorders Practicum**

Multiple choice, choose the **one best** answer.

Station #1

1. Identify the agent/pest causing the observed disorder.
 - a. buckhorn plantain
 - b. crabgrass
 - c. dandelion
 - d. oxalis
 - e. purslane

2. Choose the best solution presented to manage this disorder.
 - a. nonselective preemergent herbicide
 - b. selective postemergent
 - c. nonselective postemergent
 - d. selective preemergent
 - e. either a or b

Station #2

3. Identify the agent/pest causing the observed disorder.
 - a. aphid
 - b. scale
 - c. tent caterpillar
 - d. white grub
 - e. none of these

4. Choose the best solution presented to manage this disorder.
 - a. fatty acid salts spray
 - b. Sevin
 - c. Malithion
 - d. either a or c
 - e. none of these

Station #3

5. Identify the agent/pest causing the observed disorder.
 - a. freeze/frost injury
 - b. 2,4-D damage
 - c. urine damage
 - d. Iron Chlorosis (iron deficiency)
 - e. nitrogen fertilizer burn

6. Choose the best solution presented to manage this disorder.
 - a. apply lime to the soil to raise pH
 - b. spray with dilute liquid iron solution
 - c. apply sulfur to the soil to lower pH
 - d. apply iron to the soil
 - e. remove the tree and start over with another species

Station #4

7. Identify the agent/pest causing the observed disorder.
- a. white grub
 - b. scale
 - c. tent caterpillar
 - d. aphids
 - e. trunk borer
8. Choose the best solution presented to manage this disorder.
- a. spray with Malithion
 - b. inject with Sevin
 - c. apply Dursban and irrigate in
 - d. broadcast Diazinon
 - e. fertilize and irrigate

Station #5

9. Identify the agent/pest causing the observed disorder.
- a. apple scab
 - b. crown gall
 - c. leaf spot
 - d. powdery mildew
 - e. cedar apple rust
10. Choose the best solution presented to manage this disorder.
- a. fertilize to encourage growth
 - b. cover spray with Captan
 - c. inject the soil with a systemic fungicide
 - d. remove all junipers within ten (10) miles
 - e. do nothing, it is too late

Nursery/Landscape Landscaping Practicum – 1997

Use the attached landscape plan to answer the following questions.

1. What is the scale of the given landscape plan?
 - a. approximate
 - b. 1"=10'
 - c. 1"=20'
 - d. none given

2. Who will install the perennials in the designated perennial areas?
 - a. a landscape company
 - b. the owner
 - c. the designer
 - d. a private individual

3. How many square feet does the house foundation cover?
 - a. 1540 sq. ft.
 - b. 2670 sq. ft.
 - c. 2700 sq. ft.
 - d. 2134 sq. ft.

4. A sidewalk has been proposed for area B. How many cubic yards of concrete will it take to pour a walk 4 inches thick?
 - a. approximately 3 cu. yd.
 - b. approximately 9 cu. yd.
 - c. 83 cu. yd.
 - d. 37 cu. yd.

5. A planting was installed in the northeast corner to slow chilling winter winds. What was planted for this natural windbreak?
 - a. Blue Spruce; Arrowwood Viburnum
 - b. Autumn Purple Ash
 - c. Concolor Fir; Perennials
 - d. Lilacs; Spirea

6. A dog was tied out in the yard and the compaction and his digging eliminated the grass. The dog has since been moved. How much sod should be purchased to resod the area (Area A)?

- a. 256 sq ft.
- b. 16 square
- c. 400 sq. ft.
- d. 16 rolls





7. With similar symbols representing the same plant, how many P.J.M. Rhododendron plants are needed to install this landscape as designed?

- a. 1
- b. 2
- c. 3
- d. 4

8. What is the spread of the Autumn Purple Ash?

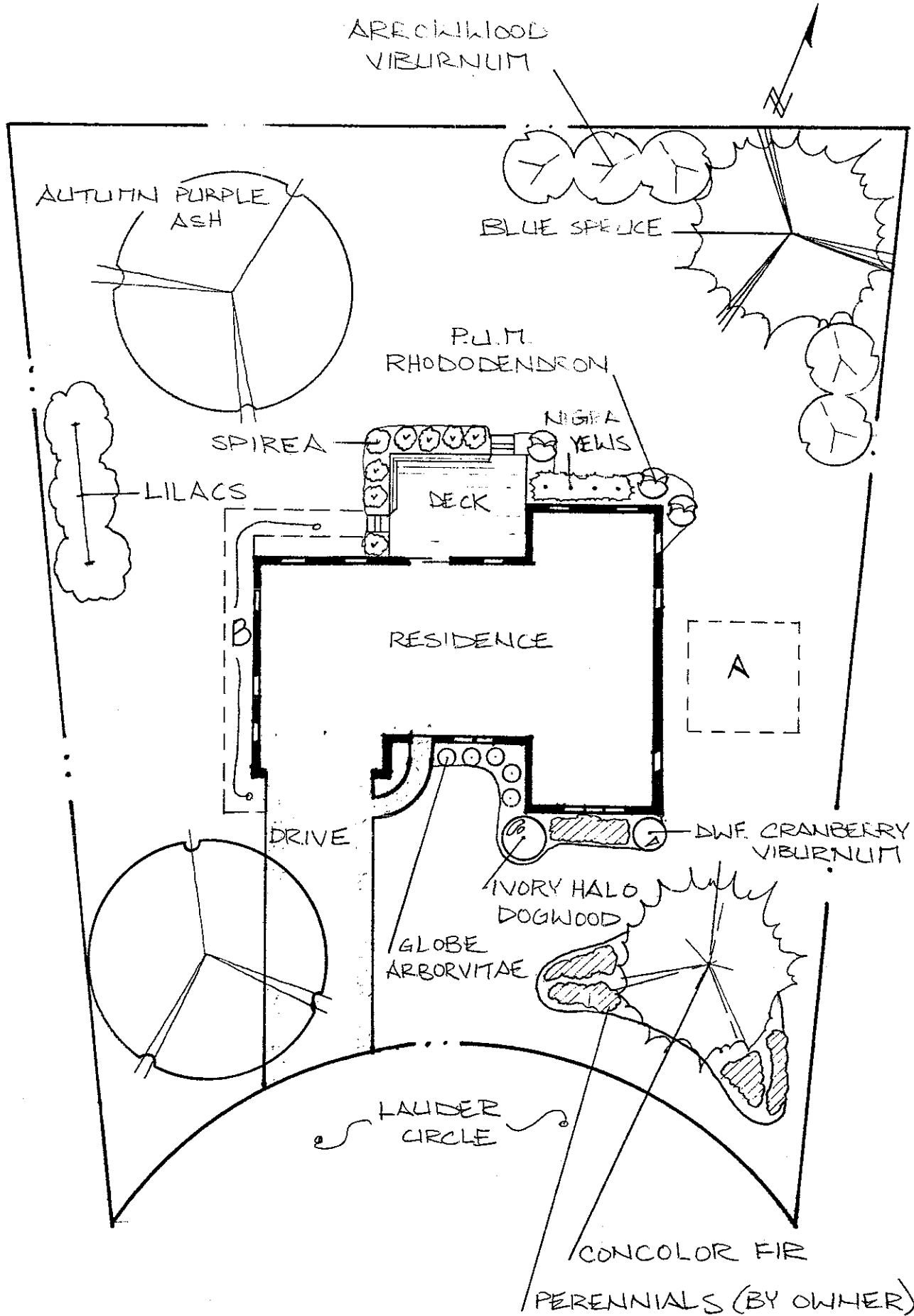
- a. 50 ft.
- b. 25 ft
- c. 35 ft.
- d. 45 ft

9. The property/lot line is designated by which symbol?

- a. 
- b. 
- c. 
- d. 

10. There is a tree planted next to the driveway to provide some shade. What type of tree is it?

- a. Blue Spruce
- b. Concolor Fir
- c. Arrowwood Viburnum
- d. Autumn Purple Ash



DRAWING BY
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SCALE: 1"=20'
DATE: JUNE 10 1997

RESIDENCE

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