

NURSERY/LANDSCAPE CDE LANDSCAPE ESTIMATION PRACTICUM

Answer the following questions using the landscape plan provided. Use your engineer's scale, pencil, and calculator. Please show work. (Look at plan carefully when answering!)

1. Landscape plans often use symbols to refer to various plant species. Using the symbols, determine how many of each of the following species is needed for the **entire** plan.

A. Dwarf Burford Holly = 11

B. 'Natchez' Crape Myrtle = 3

C. Japanese Plum Yew = 8

2. The symbols indicate that the two Sasanqua Camellias are to be _____.

A. Espaliered

B. Topiaries

C. Hedges

3. How many 15-gallon plants are used in this plan?

4

4. The single quotation marks around 'Emerald' and 'Natchez' mean they are _____.

A. Varieties

B. Cultivars

C. Evergreens

5. How many square feet of fescue lawn is there in the plan?

$19 \times 26.5 = 503.5 \text{ ft}^2$

6. If you are going to sow the lawn with fescue seed at a rate of $1\frac{1}{2}$ # of seed per 100 sq. ft., how many pounds of seed would you need?

$$503.5 \text{ ft}^2 \times \frac{1.5 \#}{100 \text{ ft}^2} = 7.55 \# \text{ of SEED.}$$

GIVEN 7

$$3'' = \frac{1 \text{ ft.}}{4}$$

$$1 \text{ yd} = 3 \text{ ft.}$$

$$1 \text{ yd}^3 = 27 \text{ ft}^3 \\ (3 \times 3 \times 3)$$

- Suppose Bed A is 750 sq. ft. and Bed B is 750 sq. ft., how many **cubic yards** of pine bark mulch would it take to apply it 3 inches deep to both beds? (Round up to the next cubic yard).

$$750 + 750 = 1500 \text{ ft}^2$$

$$1500 \text{ ft}^2 \times \frac{1 \text{ ft}}{4} = 375 \text{ ft}^3 \times \frac{1 \text{ yd}^3}{27 \text{ ft}^3} = 13.89 \approx 14 \text{ yd}^3$$

8. If you wanted to put steel edging around the turf area on all sides (omitting the concrete walk), how many linear feet of edging do you need?

$$19 + 19 + 26.5 + 26.5 - 2 = 89 \text{ ft.}$$

9. How many square feet of ground cover bed is there in the plan?

$$7.5 \times 22 = 165 \text{ ft}^2$$

10. How many day lilies are there in the plan?

10

11. How many 5-gallon plants are there in the plan?

2

12. How many 3-gallon plants are there in the plan?

29

13. What does the symbol ↑N mean?

NORTH

14. If each 15-gallon 'Natchez' Crape Myrtle costs \$75.00 and it takes two employees 30 minutes to plant one and the pay rate for each employee is \$8.00 per hour.....

- A. What is the total cost of trees? ~~\$~~ 25.00

- B. What is the total labor cost to plant them?

$$2 \text{ Employees} \times \frac{\$8.00}{\text{hr}} \times .5 \text{ hr} \times 3 \text{ trees} = \$24.00$$

15. If you charge just the amount calculated in the #14 for installing the 3 Crape Myrtles, how much profit have you made?

\$0

16. How many square feet are there in the patio?

$$13 \times 16.5 = 214.5 \text{ ft}^2$$

17. If you want lay pavers in the patio and there are 5 pavers per square foot, how many pavers do you need?

$$214.5 \times 5 = 1072.5 \text{ PAVERS}$$

18. If pavers can be installed for \$8.00 per square foot, how much do you charge for the installation?

$$214.5 \times \$8 = \$1716.00$$

19. If you need a 4" deep compacted sand base under the pavers, how many **cubic yards** of sand do you need? (Round up to the next ½ cubic yard.)

GIVEN
 $4'' = \frac{1}{3} \text{ ft}$

$$214.5 \text{ ft}^2 \times \frac{1}{3} \text{ ft} = 71.5 \text{ ft}^3 \times \frac{1 \text{ yd}^3}{27 \text{ ft}^3} = 2.65 \text{ yd}^3$$

20. If you can plant four 3-gallon plants in an hour and ten 1-gallon plants in an hour, how long will it take you to plant the 3-gallon and 1-gallon plants in the plan? (Round up to the nearest whole hour).

29 3gallons - from #12
 10 1gallons (Day lilies) - from #10

$$29 \text{ plants} \times \frac{1 \text{ hr}}{4 \text{ plants}} = 7.25 \text{ hr}$$

$$10 \text{ plants} \times \frac{1 \text{ hr}}{10 \text{ plants}} = 1.00 \text{ hr}$$

8.25 hrs for all
 9 hrs (nearest whole)

