**Review Questions**

For each of the following problems write a defining table.

Then write an algorithm with numbered steps to solve the

problem. Then label each step with the name of the basic

computer operation that the computer will use during that

step.

1. Your company needs a program to compute the amount

to charge customers for mowing their lawns for an entire

season. An employee will type in the total area of the

customer’s lawn in square feet. Your company charges 10

cents per square foot to mow a lawn one time and will

mow each lawn once a week for 15 weeks.

|  |  |  |
| --- | --- | --- |
| Input | Defining table properties | output |
| -Get total area in square feet | -For one-week charge: multiply the total area by 10 cents  -For the amount to charge for the entire season = multiple = value of one-week charge with 15 weeks | The amount to charge for the entire season |

2. You have been asked to write a computer program that

will output an employee’s after tax pay. Your program will

read from the keyboard the number of regular hours and

overtime hours that the employee worked and the

employee’s regular hourly wage. The employee is paid a

bonus of 1.5 times regular pay for each overtime hour

worked. Tax is 15% of the employee’s gross pay.

|  |  |  |
| --- | --- | --- |
| Input | Defining table properties | output |
| A list of employee worked hours  Get:  -regular hours  -overtime hours  -regular hourly wage | For each employee  -regular payment =regular hours \* regular hourly wage  -Bonus =overtime hours \*1.5\*regular hourly wage  - regular payment with bonus : Add regular payment + bonus  -tax = multiple 15% by the value of regular payment with bonus  -subtract the tax values from regular payment with bonus | Net payment of the employee |

3. Which of the following are control structures? (Mark all

that apply.)

a. input

b. computation

c. sequence

d. selection

e. repetition

f. try, catch, and throw

g. storage

h. output