



Name: \_\_\_\_\_ Teacher: \_\_\_\_\_

I. Non-dynamic linked list.

A. Given the illustration below, write the structure definition of the linked list below. You can define your own data types.

NOTE: ptr and numlist are variables, NOT DATATYPES.

ptr

→

numlist

→

x

7

num

after

→

y

14

num

after

→

z

21

num

●

after

WRITE YOUR ANSWER HERE!

B. C Statements.

Based on the data structure definition you have created in <b>part A</b> ), <b>WRITE the C STATEMENT</b> which will accomplish each of the following. (25 pts)	
QUESTIONS:	ANSWERS:
1) Declare variables <b>x</b> , <b>y</b> and <b>z</b>	
2) Declare variable <b>numlist</b>	
3) Declare variable <b>ptr</b>	
4) Let variable <b>numlist</b> point to <b>x</b>	
5) Let variable <b>ptr</b> point to <b>numlist</b>	
6) Let the variable <b>after</b> of variable <b>x</b> point to <b>y</b>	
7) Let the variable <b>after</b> of variable <b>y</b> point to <b>z</b>	
8) Let the variable <b>after</b> of variable <b>z</b> be <b>null</b>	
9) Using <b>ptr</b> , assign variable <b>num</b> of <b>x</b> the value of 1	
10) Using <b>ptr</b> , assign variable <b>num</b> of <b>y</b> the value of 3	
11) Let <b>ptr</b> point to variable <b>after</b> of variable <b>x</b> without breaking the list (3pts)	
12) Using <b>ptr</b> , let <b>numlist</b> point to variable <b>y</b> breaking the list	

Page 1 of 1