2) (5 pts) ALG (Linked Lists)

Suppose we have a singly linked list implemented with the structure below and a function that takes in the head of the list.

```
typedef struct node {
    int num;
    struct node* next;
} node;

void whatDoesItDo (node * head) {

    int tot = 0;
    while (head != NULL) {
        head->data += tot;
        tot = head->data;
        head = head->next;
    }
}
```

If we call whatDoesItDo(head) on the following list, show the list after the function has finished.

head → 3 → 9 → 7 → 1 → 4 → NULL? Please fill in the designated slots below.

→ 3 → 12 → 19 → 20 → 24 → NULL

Grading: 1 pt per slot all or nothing, no exceptions.

Note: The code is transforming the list to be a prefix sum version of the old list. (So the kth item in the update list will store the sum of all the first k items in the old list.