## Sequences Homework

1. Write down the next two numbers in each of these sequences:
a) $1,4,8,13,19 \ldots . .$.
b) $25,23,19,13,5$......
c) $48,24,12,6,3 \ldots .$.
d) $3,8,6,11,9 \ldots \ldots$.
2. Ruth the restaurant owner is considering the number of tables she will need to seat her customers.
She draws up some plans which are shown below.
$\stackrel{+(\cdot)}{+\infty}+$
1 Table
6 customers


a) Copy the table below and fill in the blank spaces.

| Tables(T) | 1 | 2 | 3 | 4 |  | 8 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Customers $(C)$ | 6 | 10 | 14 |  |  |  |

b) Find an equation that allows you to calculate the number of customers if you are told the amount of tables. Write it in form $C=$ (where $C$ is the number of customers)
c) Use your equation to calculate
(i) how many customers you would have round 15 tables.
(ii) how many tables are required for 66 customers.

