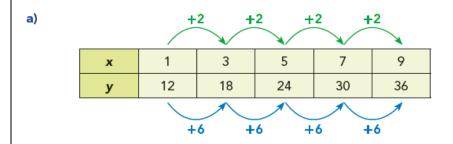
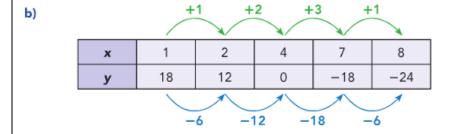
## TSW identify \_\_\_\_\_\_ and nonlinear functions by analyzing tables and graphs Vocabulary Linear Function Rate of Change

You can find tell whether a function is linear by finding the rate of change, as shown below:

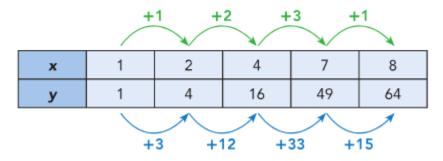
**Examples of Linear Functions** 





## **Examples of Non-Linear Functions**

c)



## **Math Note**

A function with a varying rates of change is nonlinear.

## Example 7 Tell whether a function represented in a table is linear.

The table shows the cooking times recommended for roasting turkeys of different weights. Tell whether the relation between the weight of a turkey, *x* pounds, and the time it takes to roast the turkey, *t* hours, is a linear function.

Weight of Turkey (x pounds)	10	15	20	30
Time Taken (t hours)	3.0	3.5	4.0	5.0