Exercise 11

Does the following table represent a linear function? If so, find the linear equation that models the data.

x	6	8	12	26
$g(x)$	−8	−12	−18	−46

Solution

The table does not represent a linear function. Notice that when x goes from 6 to 8 (an increase of 2), $g(x)$ decreases by 4. When x goes from 8 to 12 (an increase of 4), $g(x)$ decreases by 6; $g(x)$ should decrease by 8 for it to be a linear function.