

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

US Key

## Linear Relations Review

The pattern in the table below continues.

x	y
1	7
2	11
3	15
4	19

+1 ↪ ↻ +4

i) Describe the pattern that relates  $x$  to  $y$ .

ii) Write an equation that relates  $x$  to  $y$ .

$$y = 4x + 3$$

iii) Verify your equation by substituting values from the table.

$$7 = 4(1) + 3$$
$$7 = 7 \checkmark$$

iv) If  $x=12$ , what is  $y$ ?

$$y = 4(12) + 3$$
$$y = 48 + 3 = 51$$

v) If  $y=35$ , what is  $x$ ?

$$35 = 4x + 3$$
$$32 = 4x$$
$$8 = x$$

vi) On a piece of graph paper, graph the data.