

WALT Check your understanding

Successcriteria I am confident about creating a rule for a linear pattern

Fluency

1 (a) Copy and complete each of the following tables of values for the rules given for values of x in the range -2 to 2.

(b) Use the table of values to draw a graph of the relationship.

(i) $y = x + 1$

x	-2	-1	0	1	2
y	-1				
(x, y)	(-2, -1)				

(ii) $y = \frac{x}{2}$

x	-2	-1	0	1	2
y	-1				
(x, y)	(-2, -1)				

(iii) $y = 3x - 1$

x	-2	-1	0	1	2
$3x$	-6				
$3x - 1$	-7				
(x, y)	(-2, -7)				

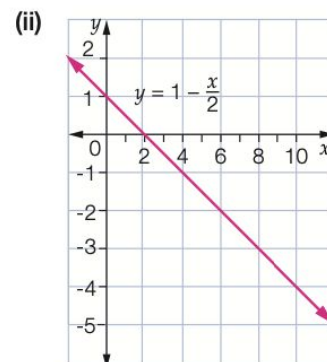
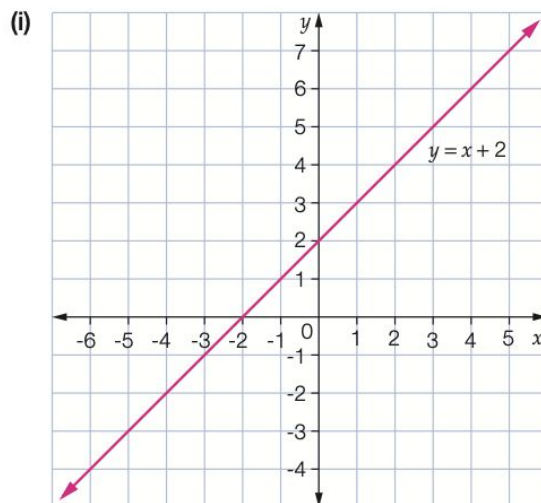
(iv) $y = -x - 4$

x	-2	-1	0	1	2
$-x$	2				
$-x - 4$	-2				
(x, y)	(-2, -2)				

2 For each of the following graphs, find:

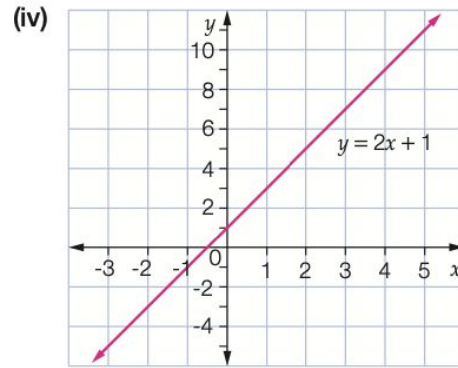
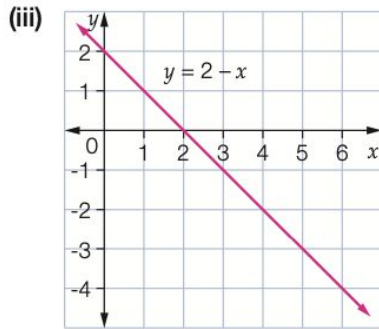
(a) the value of y when $x = 4$

(b) the value of x when $y = -3$.



WALT Check your understanding

Successcriteria I am confident about creating a rule for a linear pattern



3 For each of the graphs in Question 2:

- (a) state the x -intercept and write the coordinates of the point
- (b) state the y -intercept and write the coordinates of the point
- (c) state whether the gradient of the line is positive or negative.

4 The coordinates of a point that lies on the graph of $y = 5x - 4$ are:

- A (1, 9) B (2, -6) C (0, 4) D (-1, -9)

5 Which table of values matches coordinates obtained using the equation $y = 2x - 3$?

A

x	-3	-2	0	2	3
y	-9	-7	-3	1	3

B

x	-3	-2	0	2	3
y	3	1	-3	-3	-9

C

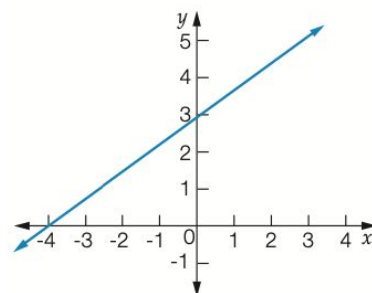
x	-3	-2	0	2	3
y	-6	-5	-3	-1	0

D

x	-3	-2	0	2	3
y	3	-1	-3	7	9

6 The coordinates of the x -intercept and the y -intercept are respectively:

- A (3, -4) and (0, 0)
- B (0, 3) and (-4, 0)
- C (0, -4) and (3, 0)
- D (-4, 0) and (0, 3)



Check your answers

WALT Check your understanding

Successcriteria I am confident about creating a rule for a linear pattern

1 (a) (i)

x	-2	-1	0	1	2
y	-1	0	1	2	3
x, y	(-2, -1)	(-1, 0)	(0, 1)	(1, 2)	(2, 3)

(ii)

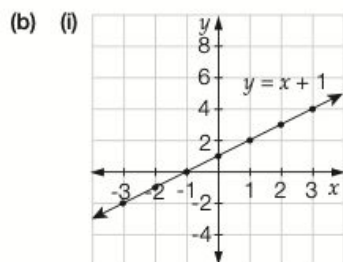
x	-2	-1	0	1	2
y	-1	-0.5	0	0.5	1
x, y	(-2, -1)	(-1, -0.5)	(0, 0)	(1, 0.5)	(2, 1)

(iii)

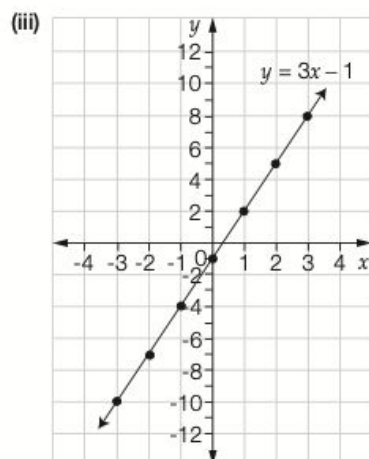
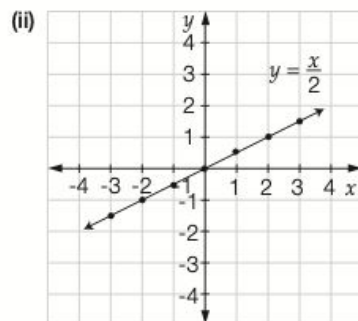
x	-2	-1	0	1	2
$3x$	-6	-3	0	3	6
$3x - 1$	-7	-4	-1	2	5
(x, y)	(-2, -7)	(-1, -4)	(0, -1)	(1, 2)	(2, 5)

(iv)

x	-2	-1	0	1	2
$-x$	2	1	0	-1	-2
$-x - 4$	-2	-3	-4	-5	-6
(x, y)	(-2, -2)	(-1, -3)	(0, -4)	(1, -5)	(2, -6)

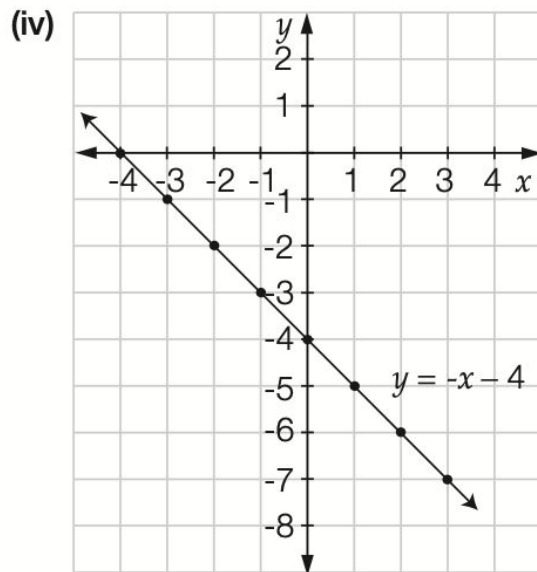


Did you get it right?



WALT Check your understanding

Successcriteria I am confident about creating a rule for a linear pattern



- 2 (a) (i) 6 (ii) -1 (iii) -2 (iv) 9
(b) (i) -5 (ii) 8 (iii) 5 (iv) -2
- 3 (a) (i) -2, (-2, 0) (ii) 2, (2, 0) (iii) 2, (2, 0)
(iv) -0.5, (-0.5, 0)
(b) (i) 2, (0, 2) (ii) 1, (0, 1) (iii) 2, (0, 2) (iv) 1, (0, 1)
(c) (i) positive (ii) negative (iii) negative (iv) positive
- 4 D 5 A 6 D
- 7 (a) A (b) C (c) D