

Linear Equations and Tables of Values (B)

Equations of straight lines in the form of $y = mx + c$ will generate an arithmetic sequence.

| | | | | | | | | |
|-----|----|----|----|-----|---|---|---|---|
| x | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 4 |
| y | | | | c | | | | |

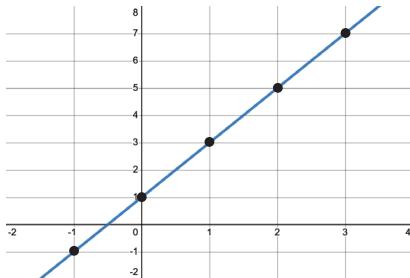
$$y = mx + c$$

+ m

Section A Fill in the x and y values for the points on the straight lines and write the equations.

Example

1)

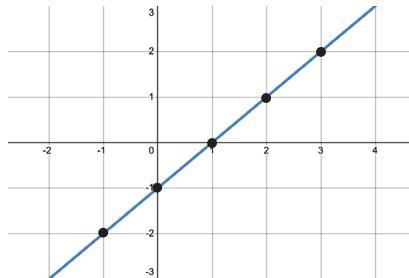


| | | | | | |
|-----|----|---|---|---|---|
| x | -1 | 0 | 1 | 2 | 3 |
| y | -1 | 1 | 3 | 5 | 7 |

+ 2

$$y = \boxed{2} x \boxed{+ 1}$$

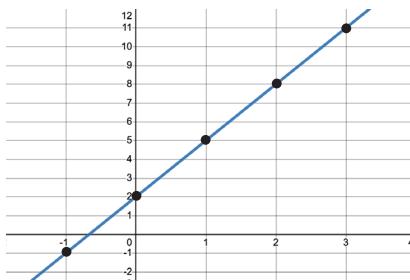
2)



| | | | | | |
|-----|----|---|---|---|---|
| x | -1 | 0 | 1 | 2 | 3 |
| y | | | | | |

$$y = \boxed{} x \boxed{}$$

3)

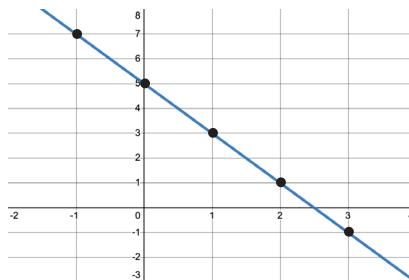


| | | | | | |
|-----|----|---|---|---|---|
| x | -1 | 0 | 1 | 2 | 3 |
| y | | | | | |

+ 2

$$y = \boxed{} x \boxed{}$$

4)



| | | | | | |
|-----|----|---|---|---|---|
| x | -1 | 0 | 1 | 2 | 3 |
| y | | | | | |

$$y = \boxed{} x \boxed{}$$

Section B

Fill in the gaps in the tables and find the equation of the straight lines.

1)

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

↓ ↓ ↓

$$y = \underline{\hspace{2cm}}$$

2)

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

↓ ↓ ↓

$$y = \underline{\hspace{2cm}}$$

Linear Equations and Tables of Values (B)

3)

| | | | | | | |
|-----|----|---|---|---|----|---|
| x | -1 | 0 | 1 | 2 | 3 | 4 |
| y | -2 | | 4 | | 10 | |

$y = \underline{\hspace{2cm}}$

4)

| | | | | | | | |
|-----|----|---|---|---|---|---|----|
| x | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| y | | | | | 1 | | -5 |

$y = \underline{\hspace{2cm}}$

5)

| | | | | | | |
|-----|-----|----|---|---|----|---|
| x | -2 | -1 | 0 | 1 | 2 | 3 |
| y | -13 | | | | -5 | |

$y = \underline{\hspace{2cm}}$

6)

| | | | | | |
|-----|----|---|---|---|---|
| x | -1 | 0 | 1 | 2 | 3 |
| y | 2 | | | | 4 |

$y = \underline{\hspace{2cm}}$

7)

| | | | | | | |
|-----|----|------|---|---|---|-----|
| x | -2 | -1 | 0 | 1 | 2 | 3 |
| y | | -2.5 | | | | 3.5 |

$y = \underline{\hspace{2cm}}$

8)

| | | | | | | | |
|-----|----|----|----|---|---|---|----|
| x | -3 | -2 | -1 | 0 | 1 | 2 | 3 |
| y | -5 | | | | | | 19 |

$y = \underline{\hspace{2cm}}$

Section C Write the coordinates in the table, fill in the gaps and find the equation

- 1) (-2, -5) and (2, 3)

| | | | | | | | |
|-----|----|----|----|---|---|---|---|
| x | -3 | -2 | -1 | 0 | 1 | 2 | 3 |
| y | | | | | | | |

$y = \underline{\hspace{2cm}}$

- 2) (-2, 5) and (3, 10)

| | | | | | | | |
|-----|----|----|----|---|---|---|---|
| x | -3 | -2 | -1 | 0 | 1 | 2 | 3 |
| y | | | | | | | |

$y = \underline{\hspace{2cm}}$

- 3) (-1, 12) and (4, 7)

| | | | | | | | |
|-----|----|---|---|---|---|---|---|
| x | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| y | | | | | | | |

$y = \underline{\hspace{2cm}}$

- 4) (-4, -16) and (-1, -7)

| | | | | | | | |
|-----|----|----|----|----|---|---|---|
| x | -4 | -3 | -2 | -1 | 0 | 1 | 2 |
| y | | | | | | | |

$y = \underline{\hspace{2cm}}$

- 5) (-3, 6) and (1, 8)

| | | | | | | | |
|-----|----|----|----|---|---|---|---|
| x | -3 | -2 | -1 | 0 | 1 | 2 | 3 |
| y | | | | | | | |

$y = \underline{\hspace{2cm}}$

- 6) (3, 7) and (6, -5)

| | | | | | | | |
|-----|---|---|---|---|---|---|---|
| x | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| y | | | | | | | |

$y = \underline{\hspace{2cm}}$

- 7) (-2, 8) and (4, 5)

| | | | | | | | | |
|-----|----|----|----|---|---|---|---|---|
| x | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 4 |
| y | | | | | | | | |

$y = \underline{\hspace{2cm}}$

- 8) (-2, -9) and (6, 3)

| | | | | | | | | | |
|-----|----|----|---|---|---|---|---|---|---|
| x | -2 | -1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| y | | | | | | | | | |

$y = \underline{\hspace{2cm}}$