Functions: inputs, domains, tables and graphs — Further practice

Year 8, lower volume • text pp. 49–58 • textbook lessons 25–29

Further practice 11

For the given relation, find y when $x = 0$.

$$y = 2x - 2$$

Further practice 12

Every input in the table has output 4. Is this a function? Is it a constant function?

x	y
-1	4
0	4
1	4

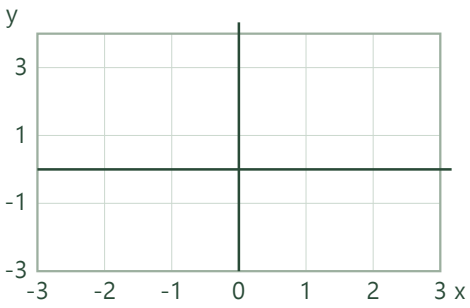
Use the stated conditions and the labelled scales.

Further practice 13

For $y = x^2$, complete the outputs at $x = -2, 0, 2$. Is one output shared by two inputs allowed?

Further practice 14

Draw the graph of $y = x + 1$ for $-2 \le x \le 2$. Make a value table first.



Use the stated conditions and the labelled scales.

Extension 15

The vertical line $x = 2$ contains the points shown. Does it define y as a function of x?

x	y
2	-1
2	1

Use the stated conditions and the labelled scales.

Extension 16

The 60 L tank fills at 3 L/min and stops when full. A learner uses V=3t at t=21 to predict 63 L. Explain why the calculation does not give a valid filling-stage prediction.