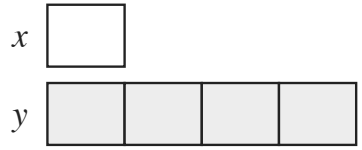
Ratios and linear functions

1

$x : y = 1 : 4$. Complete the table and the rule.



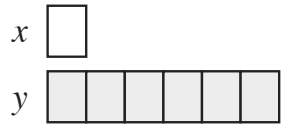
x	1	2	5	10
y	4			

× 4

$y =$ ☐ x

2

$x : y = 1 : 6$. Complete the table and the rule.



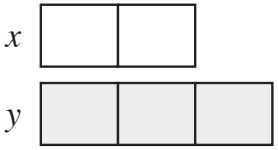
x	1	3	4	7
y	6			

×

$y =$ ☐ x

3

$x : y = 2 : 3$. Complete the table and the rule.



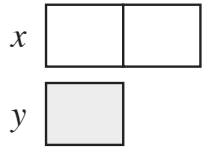
x	2	4	8	10
y				

×

$y =$ ☐ x

4

$x : y = 2 : 1$. Complete the table and the rule.



x	2	4	6	10
y				

×

$y =$ ☐ x

5

$y = 8x$. Complete the bars, the table and the ratio.



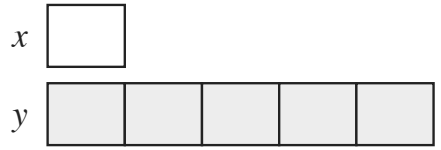
x	1	2	3	5
y				

×

$x : y =$ ☐ : ☐

6

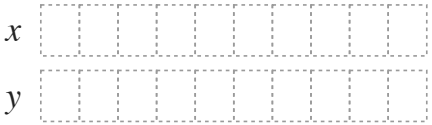
$x : y = 1 : 5$. Nell writes the rule as $x = 5y$. Use the column $x = 1$, $y = 5$ to show that Nell is wrong.
Write the right rule.



Rule _____

7

A gardener mixes x kg of compost with y kg of soil in the ratio 4 : 5. Write the rule. Find y when $x = 20$.



Rule _____

$y =$ _____

8

$y = 2.5x$. (a) Write the ratio $x : y$ in its simplest form. (b) Find x when $y = 30$.

(a) _____

(b) _____

Ratios and linear functions *further practice*

9

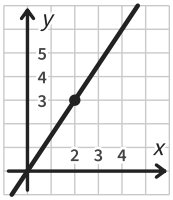
$x : y = 5 : 2$. Write the rule.
Find y when $x = 15$.

Rule _____

$y =$ _____

10

Use the marked point to write $x : y$ in its simplest form and the rule for this line.



$x : y =$ _____

Rule _____

11

At a fair, x pounds buys y tokens.
£4 buys 10 tokens.
(a) Write the rule. (b) How many pounds buy 35 tokens?

(a) _____

(b) _____

12

Which of these points are on the line $y = 4x$?
(3, 12), (5, 18), (7, 28), (0, 0), (6, 20)

13

The rule for x and y is $2y = 7x$.
(a) Write the ratio $x : y$.
(b) Write the rule as $y = \square x$.

(a) _____

(b) _____

14

A loaf uses x g of seeds and y g of flour, where $y = 3x$. It uses 240 g of seeds and flour altogether.
How much flour does it use?

Answer _____

15

$x : y = 4 : 3$. Complete the table.

x	4	8		20
y	3		9	

16

Jay says that $y = 3x$ means the same as $x : y = 3 : 1$.
Is Jay right? Explain.