

Ratios and Linear Functions

ANSWERS

1

$x:y = 1:3$. Complete the table and the rule.

x

y

x	1	2	4	5
y	3	6	12	15

$\times 3$

$y = 3x$

2

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

x

y

x	1	4	5	10
y	2	8	10	20

$\times 2$

$y = 2x$

3

$x:y = 1:5$. Complete the table and the rule.

x

y

x	1	3	4	10
y	5	15	20	50

$\times 5$

$y = 5x$

4

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

x

y

x	1	2	5	8
y	4	8	20	32

$\times 4$

$y = 4x$

5

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

x

y

x	1	2	3	5
y	6	12	18	30

$\times 6$

$y = 6x$

6

$x:y = 1:8$. Complete the bars, the table and the rule.

x

y

x	1	2	4	5
y	8	16	32	40

$\times 8$

$y = 8x$

7

Each car has 4 wheels. x cars have y wheels. Complete the bars, the table and the rule.

x

y

x	1	2	3	6
y	4	8	12	24

$\times 4$

$y = 4x$

8

$y = 5x$. Complete the bars, the table and the ratio.

x

y

x	1	2	4	7
y	5	10	20	35

$\times 5$

$x:y = 1:5$

Ratios and Linear Functions *further practice*

ANSWERS

9



$x : y = 1 : 7$. Complete the bars, the table and the rule.

x

y

x	1	2	3	5
y	7	14	21	35

$y = 7x$

10



$x : y = 1 : 3$. Complete the bars, the table and the rule.

x

y

x	10	20	30	50
y	30	60	90	150

$y = 3x$

11



A pack has 6 pens. x packs have y pens. Complete the bars, the table and the rule.

x

y

x	1	3	4	10
y	6	18	24	60

$y = 6x$

12



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

x

y

x	1	3	5	8
y	4	12	20	32

$y = 4x$

13



$x : y = 1 : 5$. Write the rule.
Find y when $x = 6$.

x

y

$6 \times 5 = 30$

Rule $y = 5x$

$y = 30$

14



Write the ratio $x : y$ and the rule for this table.

x	1	2	3	4
y	6	12	18	24

$1 \times 6 = 6, 2 \times 6 = 12$

$x : y = 1 : 6$

Rule $y = 6x$

15



A spider has 8 legs. x spiders have y legs. Write the rule.
How many spiders have 40 legs?

x

y

$40 \div 8 = 5$

Rule $y = 8x$

Answer 5 spiders

16



$x : y = 1 : 3$. Max says the rule is $y = x + 2$, because 3 is 2 more than 1. Is Max right?

x

y

When $x = 2$, $y = \dots$

When $x = 2$, $y = 6$, not $2 + 2 = 4$.

No. y is 3 times x , so $y = 3x$