

Year 6 Homework Answers

Module 4: Introduction to ratios

1.

1:4	1:4	1:10
1:2	1:3	1:7
7:6	3:1	4:9
9:2	1:10	2:3

2.

N/A

3.

2:6, 3:9, 24:72, 12:36, 10:30, 13:39

4.

4:10, 20:50, 1:2.5, 12:30, 8:20

5.

3:8 Shade 24 squares	5:9 Shade 15 squares
3:4 Shade 9 squares	2:7 Shade 4 squares

6.

4	$\frac{1}{6}$	0.4
8	12	0.6
7.5	3	1.5
2	64	20

7.

$1:3 = 2:6 = 3:9 = 4:12 = 5:15 = 6:18 = 7:21$
$4:7 = 8:14 = 20:35 = 2:3.5 = 44:77 = 48:84 = 16:28$
$5:8 = 2.5:4 = 10:16 = 15:24 = 25:40 = 60:96 = 35:56$
$2.5:5 = 1:2 = 5:10 = 25:50 = 50:100 = 50:100 = 10:20$

8.

Equivalent to 1 : 2	Equivalent to 2 : 3	Equivalent to 2 : 5
7 : 14; 24 : 48; 9 : 18 17 : 34; 3 : 6	4 : 6; 10 : 15; 8 : 12 18 : 27; 14 : 21; 22 : 33	8 : 20; 1 : 2.5; 16 : 40 40 : 100

9.

Triangle to heart: $28 : 56 = 1 : 2$
Heart to (triangle + heart) $56 : 84 = 2 : 3$

Circle to pentagon: $64 : 16 = 4 : 1$
Pentagon to (circle + pentagon) $16 : 80 = 1 : 5$

10.

12 : 18
1 : 4
35 : 40
1:3

11.

$$80 : 5 = 16 : 1$$

12.

$$22 : 76 = 11 : 38$$

13.

2 cups of sugar need 6 cups of flour

14.

$$3 : 7 = 15 : 35$$

There are 35 orange flowers

15.

$$4 + 9 = 13 \text{ parts in total}$$

$$65 \div 13 = 5 \text{ people per part}$$

$$\text{Wear glasses: } 4 \times 5 = 20 \text{ people}$$

$$\text{No glasses: } 9 \times 5 = 45 \text{ people}$$

16.

$$2 + 3 = 5 \text{ parts}$$

$$30 \div 5 = 6 \text{ people per part}$$

$$\text{Girl: } 2 \times 6 = 12$$

$$\text{Boy: } 3 \times 6 = 18$$

17.

$$12 : 7 = 144 : 84$$

There are 144 white cars

18.

a) $10 : 25 : 15$; there are 25 chickens

b) $12 : 30 : 18$; there are 12 cows

c) $6 : 15 : 9$; there are 9 sheep

19.

a) $25 : 40$; there are 40 boys

b) $15 : 24$; there are 15 girls

c) $5 + 8 = 13$ parts

$26 \div 13 = 2$ people per part

Girl: $5 \times 2 = 10$

Boy: $8 \times 2 = 16$

20.

a) $6 : 9 : 3$; there are 3 oranges

b) $10 : 15 : 5$; there are 10 strawberries

c) $20 : 30 : 10$; there are 30 pineapples

d) $2 + 3 + 1 = 6$ parts

$30 \div 6 = 5$ pieces of fruit in each part

Strawberry: $2 \times 5 = 10$

Pineapple: $3 \times 5 = 15$

Orange: $1 \times 5 = 5$