Ratio

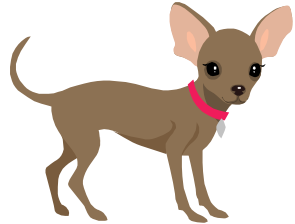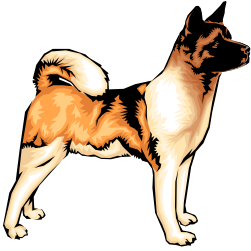## Exercise 1

1) Write down the ratio of

    a) dogs to cats

    b) cats to dogs.

2) Write down the ratio of

    a) females to males

    b) males to females.
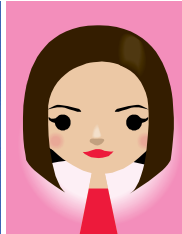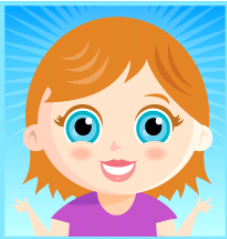
3) Write down the ratio of
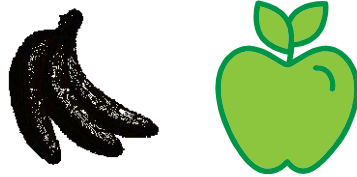   **a)** squares to circles
   b) circles to squares.
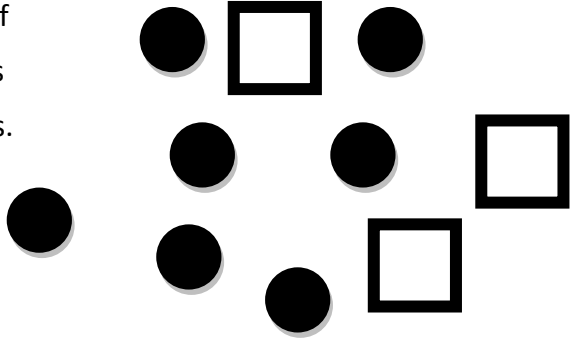
4) Write down the ratio of
   a) apples to bananas
   b) bananas to apples.

5) Write down the ratio of
   a) scissors to telephones
   b) telephones to scissors.
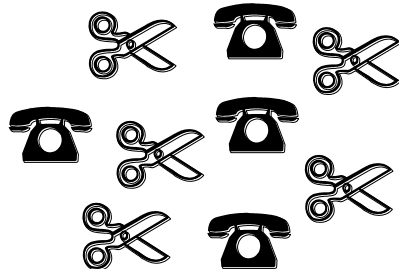
6) Write down the ratio of
   a) stars to crosses
   b) crosses to stars
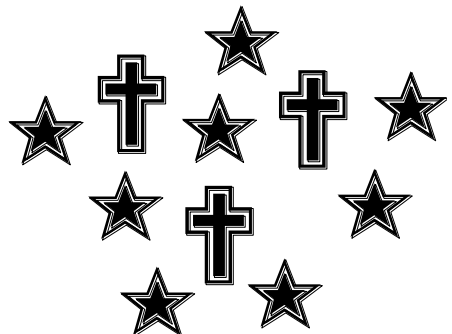
8   **a)** Write down the ratio of desks to chairs

b) Now try to write this ratio in its simplest form
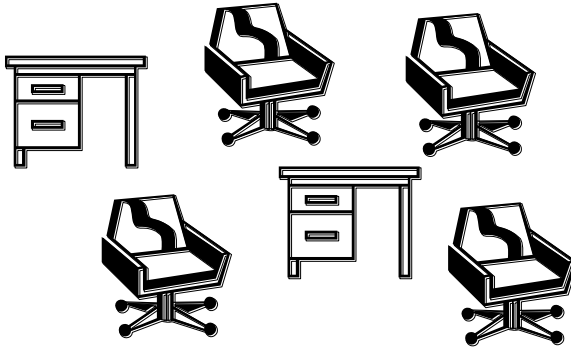
c) Write down the ratio of chairs to desks.

d) Now try to write this ratio in its simplest form

9
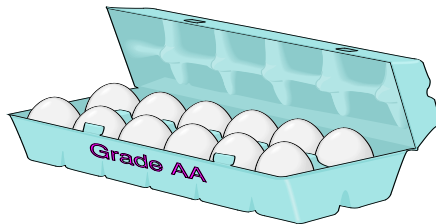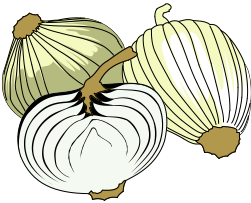
a) Write down the ratio of onions to eggs

b) Now try to write this ratio in its simplest form

c) Write down the ratio of eggs to onions

d) Now try to write this ratio in its simplest form.

10) Fergus the farmer uses 2 dogs to look after his 40 sheep.

    a) Write the ratio of dogs to sheep in simplest form.

    b) Write the ratio of sheep to dogs in simplest form.

11) Fergus also has a herd of 10 cows which has given birth to 30 calves.

    a) Write the ratio of cows to calves in simplest form.

    b) Write the ratio of calves to cows in simplest form.

12) Fergus also has 5 pigs and 25 piglets.

    a) Write the ratio of pigs to piglets in simplest form.

    b) Write the ratio of piglets to pigs in simplest form.

13) Write each of the following ratios in simplest form.

a) 2:8	**b)** 9:3	**c)** 8:4	**d)** 4:12
e) 10:5	**f)** 6:12	**g)** 20:5	**h)** 12:3
i) 6:18	**j)** 5:35	**k)** 7:28	**l)** 6:6
m) 20:4	**n)** 30:3		

Exercise 2

1) Nissan cars use either petrol or diesel.
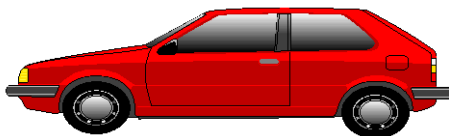
The ratio of petrol to diesel is 5:2.

Copy and complete this table

number of petrol cars	number of diesel cars
5	2
10	
15	
20	
40	
	10
	12
	14
	20

2) Nissan's cars can be either right hand drive or left hand drive.

The ratio of left hand drive to right hand drive is 8:3.

Copy and complete this table

number of left hand drives	number of right hand drives
8	3
16	
24	
40	
80	
	12
	18
	33
	60

3) Find the missing numbers in these pairs of equal ratios:

a) 3:2 = 9: **?**   **b)** 1:4 = **?** ‹:12   **c)** 7:3 = 21: **?**

d) 5:2 = 25: **?**   **e)** 8:3 = **?** :21   **f)** 3:5 = **?** ‹:20

g) 4:9 = 20: **?**   **h)** 13:3 = **?** ‹:21.

4) **a)** Two numbers are in the ratio 3:4. If the smaller number is 6, What is the larger number?

b) Two numbers are in the ratio 7:9. If the larger number is 27, What is the smaller number?

5) Copy and complete this table

Class	ratio of boys:girls	boys	girls
2A	1:2	6	
2B	3:1		7
2C	3:2	12	
2D	2:3		15
2E	3:4	6	
2F	5:2		8
2G	3:7		14
2H		20	10

Exercise 3

1) Brian and Norma are given **£32** to share between them

in the ratio 3:5.

a) How much does Brian get?

b) How much does Norma get?

2) George and Evelyn share

£450 in the ratio 1:2.

    a) How much does George get?

    b) How much does Evelyn get?

3) Tamsin and Hugh share
£360 in the ratio 5:4.

    a) How much does Tamsin get?

    b) How much does Hugh get?

4) Ravi and Delia share **£4800 in the ratio 5:7.**

Calculate how much each person gets?

5) William and Ruth share **£800 in the ratio 2:3.**

How much does each get?

6) Divide: **a)** 80cm of wire in the ratio 1:3.

               b) 95litres of juice in the ratio 2:3.

               c) 246kg of sand in the ratio 5:1.

7) There are 245 people in a crowd.

Men and women are in the ratio 3:4.

Calculate the number of men and the number of women.

8) Share £175 in the ratio 4:2:1.

9) Share £256 in the ratio 5:2:1.

10) Share £396 in the ratio 6:3:2.

11) Share £455 in the ratio 6:5:2.

12. Share £720 in the ratio 7:6:5.

13) Share £300 in the ratio 6:5:4.

14) Share 950kg of soil between 3 gardeners in the ratio 4:6:9.

15) Share 4200ml of water between Mr Brown, Mrs Jones and Mr Westwater in the ratio 3:7:2.

16) A carton containing 2000 millilitres of milk exactly fills 3 glasses belonging to Dieter, Jan and Joe.

If the amounts each glass holds are in the ratio 11:8:6, how much milk does each child receive?