Multiplication/Division of Fractions. (Worded Questions).

1). Andy earns £96.27 a week. After deductions from his wage he takes home \(\frac{2}{3}\) of the wage. How much does he take home?

2). A beach bucket that holds 2400 ml of water is filled to the top. It has a hole in it, and as it is carried around the garden it loses \(\frac{3}{5}\) of the water. How much water a). has been lost, b). is still in the bucket?

3). A brand new car cost Sue £12462. After a week she takes it back to the garage and they tell her it is only worth \(\frac{3}{4}\) of what she paid for it. How much a). is the car now worth, b). has it depreciated in value?

4). A table designer makes tables using \(\frac{3}{8}\) metal and the rest wood. Each table is 72 Kg. What weight are a). the metal parts, b). the wooden parts?

5). At school \(\frac{7}{10}\) of the pupils have a snack at break time. There are 780 pupils in the school. How many don't have a snack at break time?

6). A magazine contains \(\frac{7}{12}\) articles and the rest are adverts. If there are 204 pages in the magazine how many pages are adverts?

7). Farmer Jill keeps cows, sheep and horses. \(\frac{1}{4}\) are cows, \(\frac{2}{3}\) are sheep and the rest are horses.
   a). What fraction are horses?
   b). Farmer Jill has 135 animals in total. How many are i). cows, ii). sheep, iii). horses?

8). Pupils at a school either arrive by bus, car or on foot. \(\frac{3}{10}\) walk and \(\frac{1}{3}\) come by bus.
   a). What fraction come by car?
   b). There are 420 pupils at the school. How many arrive i). on foot, ii). by bus, iii). by car?

9). In a garden there are grass areas, flower beds and bushes. The grassed area covers \(\frac{3}{5}\) of the garden and the flower beds cover \(\frac{1}{5}\) of the garden.
   a). What fraction of the garden is covered by bushes?
   b). If the garden is 195m\(^2\), what area is i). grass, ii). flower beds, iii). bushes?

10). Jenny has 9Kg of flour. She drops \(\frac{1}{4}\) of it. What weight of flour has she dropped?

11). Beth has a rope 23 m long. She cuts off \(\frac{1}{5}\) of it. How long are the two pieces?

12). Keith buys 16 bars of chocolate and eats \(\frac{2}{5}\) of them straight away. How much has he a). eaten, b). got left?

13). At the village fete 23 cakes are sliced ready to eat. At the end of the fete \(\frac{3}{4}\) of the cake had been sold. How much had been a). sold b). left?

14). In the local 50 page magazine \(\frac{3}{7}\) of the area of the magazine contained adverts. What area of the magazine a). contained adverts, b). didn’t contain adverts?
15). There are $1\frac{1}{2}$ litres of lemonade in a bottle. Nancy drinks $\frac{1}{3}$ of it.
How much does she drink?

16). Ron spends $3\frac{1}{2}$ hours gardening. He spends $\frac{3}{4}$ of this time mowing the lawn.
How long does he spend mowing the lawn?

17). A chef has $3\frac{1}{3}$ litres of cooking oil. He uses $\frac{2}{5}$ of it during an evening cooking.
How much does he have left over?

18). A small field is $3\frac{1}{2}$ hectares. Sheep graze on $\frac{1}{14}$ of it.
What area do the sheep graze on?

19). A garden fence is $12\frac{1}{2}$ m long though $\frac{3}{5}$ is rotten.
What length of fence is rotten?

20). A small rectangular room is to be carpeted. The length is $2\frac{1}{2}$ m and width is $1\frac{1}{5}$ m.
What area of carpet is needed?

21). Find the area of these rectangles:
   a). $4\frac{1}{3}$ m
   b). $3\frac{3}{5}$ m
   c). $2\frac{1}{10}$ m
   d). $4\frac{2}{7}$ m

22). $7\frac{3}{4}$ Kg of coffee is put into $1\frac{1}{3}$ Kg packets. How many packets will be needed?
Give your answer as a fraction, the number of packets needed.

23). A small barrel of washing up liquid contains $11\frac{1}{2}$ litres.
This is to be transferred to $\frac{3}{4}$ litre containers. How many containers will be needed?
Give your answer as a fraction, the number of containers needed.

24). A field is $17\frac{1}{2}$ hectares. The farmer ploughs $1\frac{1}{4}$ hectares a day of the field.
How many days will it take him to plough the field?
Give your answer as a fraction, the number of days needed.

25). A metal bar is $14\frac{1}{10}$ m long. How many $\frac{3}{4}$ m strips can be cut from the bar?
Give your answer as a fraction, the number of $\frac{3}{4}$ m strips.

26). For each of the following rectangles the size of one side and the area are given.
Find the size of the missing side.

   a). $1\frac{1}{2}$ m
   b). $1\frac{3}{4}$ m
   c). $2\frac{1}{3}$ m
   d). $2\frac{5}{6}$ m

   Area = $1\frac{3}{4}$ m$^2$
   Area = $4\frac{2}{3}$ m$^2$
   Area = $7\frac{1}{15}$ m$^2$
   Area = $13\frac{3}{9}$ m$^2$