## **FRACTIONS**

1) Express each of the following fractions as a decimal number and then classify them:

a) 
$$\frac{3}{2}$$

b)  $\frac{7}{5}$ 

c)  $\frac{1}{3}$ 

d)  $\frac{5}{6}$ 

e)  $\frac{3}{7}$ 

f)  $\frac{8}{10}$ 

2) Express the following numbers as fractions:

b) 1.7

c) 15.3752

d) 498.37

3) John and Ann are running a 100-meters race. John has run  $\frac{5}{6}$  of the way, and Ann has run

 $\frac{7}{8}$  of the way. Who is closer to the finish line?

4) Work out the fractions of the indicated numbers:

a) 
$$\frac{3}{4}$$
 of 200 =

b) 
$$\frac{4}{5}$$
 of  $40 =$ 

c) 
$$\frac{7}{9}$$
 of 81 =

d) 
$$\frac{5}{12}$$
 of  $72 =$ 

- 5) A kilo of cherries costs €3. What is the price of three quarters of a kilo?
- 6) There are 30 students in our class. Two thirds of them voted for Joan as their class representative. How many votes did Joan get? How many students voted for another person?
- 7) I bought a bottle of water containing 50 cl and I drank two fifths of it. How much water is left?
- 8) Cross multiply to find out if these fractions are equivalent:

a) 
$$\frac{4}{8}$$
 and  $\frac{5}{10}$ 

b) 
$$\frac{7}{6}$$
 and  $\frac{6}{5}$ 

c) 
$$\frac{3}{9}$$
 and  $\frac{6}{18}$ 

d) 
$$\frac{6}{10}$$
 and  $\frac{9}{15}$ 

9) Find the value of x so the following pairs of fractions are equivalent:

a) 
$$\frac{x}{8} = \frac{5}{10}$$

b) 
$$\frac{9}{x} = \frac{12}{8}$$

c) 
$$\frac{4}{8} = \frac{x}{6}$$

d) 
$$\frac{14}{10} = \frac{70}{x}$$

- 10) Simplify until you get the irreducible fraction:
  - a)  $\frac{8}{20}$

b)  $\frac{42}{28}$ 

c)  $\frac{8}{10}$ 

- d)  $\frac{5000}{17500}$
- 11) There are 150 fairy tale books in the library. The librarian says that  $\frac{3}{5}$  of them have been lent. How many fairy tale books are still in the library?
- 12) a) Write  $\frac{9}{5}$  as a mixed number.
  - b) Write  $5\frac{3}{7}$  as an improper fraction.
- 13) A loaf of whole wheat bread weighs 200 gr. and contains 18 gr. of fiber. What percentage of bread is fiber? If we get a similar loaf that weighs half a kilo, how much fiber is there in it?
- 14) Alan is buying a tent that costs €175 but the shop has reduced its price by 15%. How much money will Alan pay for the tent now?
- 15) A bottle of shampoo contains 300ml, but there's an offer now so we get a twenty per cent more for free. How much shampoo does the new bottle contain?
- 16) In a parking lot we can find 4500 vehicles. 75% are cars, 25% are red, 20% are blue and  $\frac{2}{3}$  have four wheels. Classify the vehicles. Use your imagination.
- 17) A bag weighs  $2\frac{7}{15}$  lb when it's full and  $\frac{13}{15}$  lb when it's empty. What is the weight of the contents of the bag?
- 18) I have to present a paper next Friday. Yesterday I wrote two fifths and I still have 18 pages left, how many pages does the paper have?
- 19) I got a chocolate box as a present for my birthday, with twenty-four bonbons. The first day I ate  $\frac{1}{6}$  of them, and the second day  $\frac{2}{5}$  of what was left. How many chocolates have I eaten? How many are left?