

Fractions – Level Two

How to Guide - ANSWERS

Question 1

- a) What is $\frac{1}{4}$ of 80? **20**
- b) What is $\frac{1}{3}$ of 42? **14**
- c) What is $\frac{2}{3}$ of 120? **80**
- d) What is $\frac{3}{4}$ of 125.25? **93.9375**
- e) What is $\frac{1}{5}$ of 400? **80**
- f) What is $\frac{7}{8}$ of 60? **52.5**

Question 2

- a) A coat was priced at £65 but is reduced by a third in the sale. What is the new price to the nearest 10p? **£43.30**
- b) Students get $\frac{1}{4}$ off the price of a cinema ticket on Thursdays. If tickets normally cost £8.60, how much would a student pay? **£6.45**
- c) A washing machine is only $\frac{2}{3}$ of the original price in the sale. If it originally cost £180, how much would it cost now? **£120**
- d) 240 people are attending a buffet. The caterers have been told that $\frac{1}{5}$ of the people are vegetarian. How many vegetarians will there be? **48**

Question 3. Write each of these fractions in its simplest form.

a) $\frac{6}{18} = \frac{1}{3}$ b) $\frac{14}{70} = \frac{1}{5}$ c) $\frac{64}{120} = \frac{8}{15}$ d) $\frac{15}{20} = \frac{3}{4}$

Question 4

a) An employer works out that out of their 1200 employees 600 are full-time.
What fraction is that? $\frac{1}{2}$

b) A supermarket finds that out of 825 people who visit in one day 400 travelled by car. What fraction is that? $\frac{16}{33}$

c) In the audience of a concert there are 320 people aged 16-24 and 280 people aged over 24. What fraction of the audience are aged over 24? *Must add to get the total audience of 600.* $\frac{28}{600} \rightarrow \frac{7}{15}$

Question 5

a) Order these from smallest to biggest

$$\frac{3}{4} \quad \frac{5}{9} \quad \frac{1}{3} \rightarrow \frac{1}{3} \quad \frac{5}{9} \quad \frac{3}{4}$$

b) Order these in descending order

$$\frac{1}{10} \quad \frac{7}{8} \quad \frac{3}{5} \rightarrow \frac{7}{8} \quad \frac{3}{5} \quad \frac{1}{10}$$

Question 6

a) $\frac{5}{9} + \frac{2}{9} = \frac{7}{9}$

b) $\frac{5}{6} - \frac{2}{6} = \frac{1}{2}$

c) $\frac{2}{3} + \frac{2}{8} = \frac{22}{24} = \frac{11}{12}$

d) $\frac{4}{5} - \frac{1}{4} = \frac{11}{20}$

Question 7

a) Convert $\frac{16}{7}$ to a mixed number = $2\frac{2}{7}$

b) Convert $3\frac{1}{9}$ to an improper fraction = $\frac{28}{9}$

c) Convert $\frac{25}{4}$ to a mixed number = $6\frac{1}{4}$

d) Convert $10\frac{2}{3}$ to an improper fraction = $\frac{32}{3}$

Additional Practise

a) What is $\frac{3}{4}$ of 95? **71.25**

b) Find $\frac{5}{8}$ of 160 = **100**

c) A fridge costs £155 in store but has $\frac{1}{3}$ off the price if you buy online. What is the price of buying online to the nearest pence? **£103.33**

d) What is $\frac{20}{150}$ in its simplest form? $\frac{2}{15}$

e) In a survey, 128 people out of 450 rated a restaurant as excellent. What fraction is this? $\frac{64}{225}$

f) Put these fractions in order: $\frac{1}{8}$ $\frac{3}{4}$ $\frac{7}{10}$ = $\frac{1}{8}$ $\frac{7}{10}$ $\frac{3}{4}$

g) What is $\frac{2}{9} + \frac{3}{4}$? $\frac{35}{36}$

h) What is $\frac{22}{7}$ as a mixed number? $3\frac{1}{7}$

i) Which of these $\frac{6}{10}$ $\frac{25}{3}$ $2\frac{3}{4}$ is largest? $\frac{25}{3}$ is larger

j) What is $\frac{12}{5} - \frac{1}{4}$? $\frac{43}{20}$ or $\frac{3}{20}$

k) A college has 360 students enrolled on a course. $\frac{2}{3}$ of them are aged 18, $\frac{1}{5}$ are under 18 and the rest are over 18. How many are over 18?

$$2/3 = 240$$

$$1/5 = 72$$

$$240 + 72 = 312$$

$$360 - 312 = 48$$