



Course	Edexcel
Time Allowed	1hr 30 min
Score	/
Percentage	/100

FRACTIONS, RATIOS AND PERCENTAGES EDEXCEL FOUNDATION QUESTION

1. JUNE 2024 1F QUESTION 14

Chaviv makes 490 loaves of bread each week for his shop.

86 of the loaves are sourdough.

(a) Write 86 as a percentage of 490

Give your answer correct to one decimal place.

..... %
(2)

A loaf of sourdough bread weighs 375 grams before it is baked.

The loaf loses 12% of its weight when it is baked.

(b) Work out the weight of the loaf after it is baked.

..... grams
(3)

2. JUNE 2024 1F QUESTION 19

Ava records the number of kilometres she drives each month.

In April, Ava drove 943 kilometres.

This is 15% more than the number of kilometres she drove in March.

Work out the number of kilometres Ava drove in March.

..... kilometres

3. JUNE 2024 1FR QUESTION 2

(a) Write 0.13 as a fraction.

.....
(1)

(b) Write a number in the box to make the statement correct.

$$\frac{16}{20} = \frac{\boxed{}}{5}$$

(1)

(Total for Question 2 is 2 marks)

4. JUNE 2024 1FR QUESTION 19

Show that $2\frac{1}{3} \div 5\frac{1}{4} = \frac{4}{9}$

3MARKS

5. JUNE 2024 2F QUESTION 3C

(c) Write 0.7 as a percentage.

..... %
(1)

(d) Write $\frac{27}{100}$ as a decimal.

.....
(1)

There are 60 plants on a plant stall.

$\frac{7}{10}$ of the plants are vegetable plants.

(e) Work out how many of the plants are **not** vegetable plants.

.....
(2)

6. JUNE 2024 2F QUESTION 6 (3 MARKS)

There are 150 animals on a farm.

Of these animals

19 are sheep

32 are goats

3 are dogs

The rest of the animals are chickens.

Write the number of chickens as a fraction of the total number of animals.

Give your fraction in its simplest form.

7. JUNE 2024 2F QUESTION 20 (3 MARKS)

Show that $2\frac{4}{7} \times 3\frac{1}{9} = 8$

8. JUNE 2024 2F QUESTION 24

Ishir plants 600 bulbs in a garden.

He plants tulip bulbs, crocus bulbs and daffodil bulbs so that

number of tulip bulbs : number of crocus bulbs : number of daffodil bulbs = 9 : 4 : 2

45% of the tulip bulbs are for yellow flowers.

$\frac{5}{8}$ of the crocus bulbs are for yellow flowers.

All of the daffodil bulbs are for yellow flowers.

Work out the number of bulbs that are for yellow flowers.

5 MARKS

9. JUNE 2024 2FR QUESTION 14

Bilpa, Claudia and David share 1200 euros.

Bilpa gets $\frac{1}{5}$ of the 1200 euros.

Claudia gets 42% of the 1200 euros.

David gets the rest of the 1200 euros.

Given that

the amount of money Bilpa gets : the amount of money David gets = $1 : n$

work out the value of n

$n =$

4 MARKS

10. JUNE 2024 2FR QUESTION 16

Footballs are made in a factory.

On Monday, 375 footballs per hour were made in the factory.

On Monday, footballs were made in the factory for 8 hours.

On Tuesday, 20% more footballs were made than on Monday.

On Tuesday, 300 footballs per hour were made in the factory.

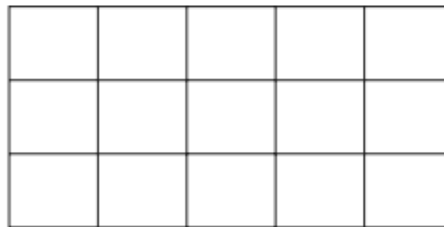
Work out for how many hours the factory made footballs on Tuesday.

..... hours

4 MARKS

11. JUNE 2023 1F QUESTION 1

(a) Shade $\frac{4}{5}$ of this shape.



(1)

(b) Write $\frac{27}{36}$ as a fraction in its simplest form.

.....
(1)

(c) Write $\frac{3}{100}$ as a decimal.

.....
(1)

(d) Write $\frac{7}{50}$ as a percentage.

..... %
(1)

12. JUNE 2023 1F QUESTION 11 (4 MARKS)

Pablo buys some tickets to go to the theatre.

3 of the tickets are for adults.

The remaining tickets are for children.

Each adult ticket costs 12 euros.

The children's tickets each cost 30% less than an adult ticket.

The total amount of money that Pablo pays for all the tickets is 94.80 euros.

Find the number of children's tickets Pablo buys.

13. JUNE 2023 1F QUESTION 16 (3 MARKS)

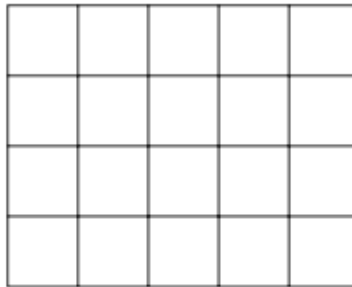
Last season, the number of goals scored by Arjun, by Simon and by Kath for their football team were in the ratios $2:5:8$

Simon scored 12 more goals than Arjun.

Work out the number of goals scored by Kath.

14. JUNE 2023 1FR QUESTION 4

Here is a shape made of squares.



(a) Shade $\frac{4}{5}$ of the shape.

(1)

(b) Write 0.7 as a percentage.

..... %
(1)

15. JUNE 2023 1FR QUESTION 15

Show that $\frac{3}{5} + \frac{2}{7} = \frac{31}{35}$

16. JUNE 2023 1FR QUESTION 16 (4 MARKS)

Roland, Seiso and Tim share the total cost of buying a plot of land.

Roland and Seiso share some of the cost in the ratio 2 : 5

Roland's share of the cost is \$1700

Tim's share of the cost is \$2150 **more** than Roland's share.

Work out the total cost of buying the plot of land.

\$.....

17. JUNE 2023 2F QUESTION 8 (3 MARKS)

A hall has 26 rows of seats.
There are 14 seats in each row.

Annie sells tickets for $\frac{3}{4}$ of the seats in the hall for a concert.
She sells each ticket for 15 euros.

Work out the total amount Annie gets from selling tickets.

..... euros

18. JUNE 2023 2F QUESTION 17 (3 MARKS)

Show that $4\frac{2}{3} \div 1\frac{1}{5} = 3\frac{8}{9}$

19. JUNE 2023 2F QUESTION 21

Nancy has some coins with a total value of 85 pence.

She has only 2 pence coins and 5 pence coins.

The ratio

number of 2 pence coins : number of 5 pence coins = 1 : 3

Nancy has more 5 pence coins than 2 pence coins.

How many more?

4 MARKS

20. JUNE 2023 2FR QUESTION 5

Here is a list of fractions.

$$\frac{4}{5} \quad \frac{3}{8} \quad \frac{2}{3} \quad \frac{12}{15} \quad \frac{7}{10}$$

One fraction from the list, when written as a decimal, is **not** a terminating decimal.

(a) Write down this fraction.

(1)

Two fractions from the list are equivalent.

(b) Write down these two fractions.

and

(1)

(c) Write $\frac{7}{10}$ as a decimal.

(1)

21. JUNE 2023 2FR QUESTION 13 (2 MARKS)

One week, an online company carried out a total of 175 deals.
49 of these deals were in yen.

Work out the percentage of deals carried out in yen.

..... %

22. JUNE 2023 2FR QUESTION 14

One month, Abbad raised money for charity by being sponsored to run and to walk.
His target was to raise 700 dirhams.

During the month, Abbad recorded a total distance of 135 km by running and by walking.
The ratio

number of km he ran : number of km he walked = 2 : 7

Abbad received 8 dirhams for each km he ran and 5 dirhams for each km he walked.

Abbad raised more money than his 700 dirhams target.

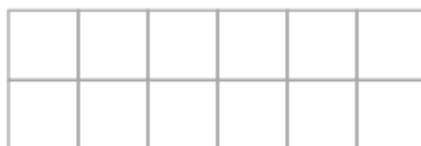
How much more?

..... dirhams

4 MARKS

23. OCTOBER 2023 1F QUESTION 5

Here is a shape made of squares.



(a) Shade $\frac{2}{3}$ of the shape.

(1)

(b) Write $\frac{3}{10}$ as a percentage.

..... %
(1)

(c) Write $\frac{48}{150}$ as a fraction in its simplest form.

.....
(1)

(d) Write $\frac{46}{7}$ as a mixed number.

.....
(1)

24. OCTOBER 2023 1F QUESTION 11

A rental company has 360 cars and some vans.

The ratio of the number of cars to the number of vans is 3 : 5

$\frac{4}{9}$ of the cars are electric.

36% of the vans are electric.

The company has more electric vans than electric cars.

Work out how many more.
Show your working clearly.

5 MARKS

25. OCTOBER 2023 1F QUESTION 20

Juan wants to buy a ticket to fly from Madrid to Berlin.

He finds two different types of ticket he can buy in a sale, ticket **A** and ticket **B**

ticket **A**
 $\frac{1}{6}$ off normal price

ticket **B**
20% off normal price

The sale price of ticket **A** is 140 euros.

The sale price of ticket **B** is 136 euros.

Work out the difference between the normal price of ticket **A** and the normal price of ticket **B**

..... euros

4 MARKS

26. OCTOBER 2023 2F QUESTION 3

(a) Write 0.03 as a fraction.

.....
(1)

(b) Write 0.9 as a percentage.

..... %
(1)

(c) Write these decimals in order of size.
Start with the smallest decimal.

0.4 0.48 0.204 0.24 0.408

.....
(1)

(d) Work out $0.93 + \frac{7}{10}$

Give your answer as a decimal.

.....
(1)

27. OCTOBER 2023 2F QUESTION 21

Avril bakes a cake.

She uses flour, butter and sugar such that

weight of flour : weight of butter = 6 : 5

weight of butter : weight of sugar = 3 : 2

Avril uses 120 grams of sugar.

Work out the weight of flour Avril uses.

..... grams

3 MARKS

28. OCTOBER 2023 2F QUESTION 22 (3 MARKS)

! Show that $3\frac{3}{7} \div 2\frac{2}{3} = 1\frac{2}{7}$

29. JANUARY 2023 1F QUESTION 12

(a) Show that $\frac{7}{8} - \frac{5}{12} = \frac{11}{24}$

(2)

30. JANUARY 2023 1F QUESTION 20

In a box, there are only green sweets, orange sweets and yellow sweets.

There are 280 sweets in the box so that

the number of green sweets : the number of orange sweets = 2 : 3

and

the number of orange sweets : the number of yellow sweets = 1 : 5

Work out how many green sweets there are in the box.

3 MARKS

31. JANUARY 2023 1FR QUESTION 7

- (a) Write these decimals in order of size.
Start with the smallest decimal.

0.5 0.54 0.45 0.504 0.405

(1)

- (b) Write 0.08 as a percentage.

..... %
(1)

(c) Write $\frac{31}{9}$ as a mixed number.

.....
(1)

(d) Find the number that is exactly halfway between $\frac{7}{25}$ and 0.88

.....
(2)

32. JANUARY 2023 1F QUESTION 20 (3 MARKS)

C grams of chocolate is shared in the ratios 2 : 5 : 8

The difference between the largest share and the smallest share is 390 grams.

Work out the value of C

$C =$

33. JANUARY 2023 2F QUESTION 12 (3 MARKS)

Last season, Alisha and Jaya scored goals for their team in the ratio 4 : 7
Jaya scored 39 more goals than Alisha.

Work out the number of goals Alisha scored.

34. JANUARY 2023 2F QUESTION 13

There are 380 students in a Sixth Form.

The students are either in the Upper Sixth or in the Lower Sixth.

The number of students in the Upper Sixth is 20 fewer than the number of students in the Lower Sixth.

$\frac{2}{5}$ of the Upper Sixth students study mathematics.

32% of the Lower Sixth students study mathematics.

Work out the total number of students in the Sixth Form who study mathematics.

.....
4 MARKS

35. JANUARY 2023 2F QUESTION 16 (3 MARKS)

Show that $3\frac{5}{7} \div 1\frac{5}{8} = 2\frac{2}{7}$

JANUARY 2023 2F QUESTION 7

36.

In a field, there are 60 sheep and 24 cows.

- (a) Find the ratio of the number of sheep to the number of cows.
Give your ratio in its simplest form.

.....
(2)

In a barn, there are only white ducks and brown ducks.

In the barn, the ratio

number of white ducks : number of brown ducks = 3 : 7

- (b) What fraction of the ducks in the barn are white?

.....
(1)

Giles and Sarah share some bales of hay in the ratio 11 : 4

Sarah receives 20 bales of hay.

(c) Work out how many bales of hay are shared in total.

(3)

37. JANUARY 2023 2F QUESTION 11

Asif has 200 beads.

Asif gives $\frac{1}{4}$ of the 200 beads to Bernadette.

Asif gives $\frac{2}{5}$ of the 200 beads to Claudio.

Asif gives 43 beads to Derek.

What fraction of the 200 beads does Asif have left?

.....
4 MARKS

38. JANUARY 2023 2F QUESTION 15 (3 MARKS)

1. Show that $4\frac{2}{3} \div 1\frac{5}{6} = 2\frac{6}{11}$

