

Write your name here

Surname

Other names

In the style of:
Pearson Edexcel
Level 1/Level 2 GCSE (9 - 1)

Centre Number

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Candidate Number

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Mathematics

Fractions

Foundation Tier

GCSE style questions arranged by topic

Paper Reference

1MA1/2F

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- **Calculators may be used.**
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**



Information

- The total mark for this paper is 80
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►



1 David earns a salary of £3500 per month.

He gets a pay rise of 4%.

Work out his new monthly salary.

.....

(3)

(Total for Question 1 is 3 marks)



2(a)

Helen wins a race.

Her time is recorded as 50.36 seconds.

Andrew comes second in the race.

His time is three-hundredths of a second slower.

Work out Andrew's time.

(2)

(b) Round Helen's time of 50.36 seconds to 1 decimal place.

(1)

(Total for Question 2 is 6 marks)



3

Write a number in each box to make correct statements.

(a) $50\% = \frac{\square}{2}$

(1)

(b) $0.3 = \frac{\square}{10}$

(1)

(c) $\frac{1}{3} = \frac{\square}{9}$

(1)

(d) $\frac{3}{15} = \frac{\square}{5}$

(1)

(Total for Question 3 is 4 marks)



4 Two banks calculate the yearly interest they pay customers.

Westminster Bank
4% of the total that you invest
For example: Invest £700
Interest = 4% of £700

District Bank
1% of the first £300 that you invest 6% of
amounts over £300 that you invest
For example: Invest £700 Interest
=1% of £300 + 6% of £400

Ashna has £500 to invest for one year.

Work out which bank will pay her more interest. State how much **extra** interest she will earn.

Bank

Extra Interest £.....

(Total for Question 4 is 5 marks)



5 There are 180 people at a wedding. 20% are children. One-half are men. The rest are women.

How many women are at the wedding?

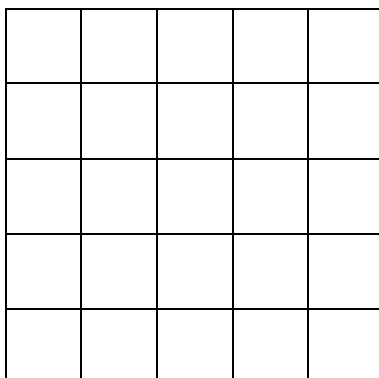
Answer

(4)

(Total for Question 5 is 4 marks)

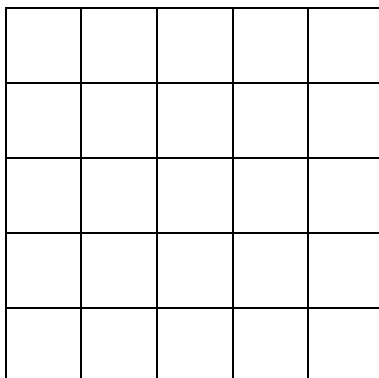


- 6 (a) Shade $\frac{9}{25}$ of this square grid.



(1)

- (b) Shade $\frac{4}{5}$ of this square grid.



(1)

- (c) Use your answers to part (a) and part (b) to write down the answer to $\frac{4}{5} - \frac{9}{25}$

Answer

(1)

- (d) Work out $\frac{2}{3}$ of 36

Answer.....

(2)

(Total for Question 6 is 5 marks)



7 (a) Use your calculator to work out $\frac{4.7}{9.4 - 3.5}$

Write down all the figures on your calculator display.

.....
(2)

(b) Write these numbers in order of size.
Start with the smallest number.

0.82 $\frac{4}{5}$ 85% $\frac{2}{3}$ $\frac{7}{8}$

.....
(2)

(Total for Question 7 is 4 marks)



8 A concert ticket costs £65 plus a booking charge of 15%.

Work out the total cost of a concert ticket.

£

(Total for Question 8 is 3 marks)

9 A school canteen sells salads and hot meals.

In one week the number of salads sold and the number of hot meals sold were in the ratio 3 : 5

The total number of salads and hot meals sold in the week was 1456

Work out the number of salads sold.

.....

(Total for Question 9 is 2 marks)



10 A garage sells British cars and foreign cars.

The ratio of the number of British cars sold to the number of foreign cars sold is 2 : 7

The garage sells 45 cars in one week.

(a) Work out the number of British cars the garage sold that week.

.....
(2)

A car tyre costs £80 plus VAT at $17\frac{1}{2}\%$.

(b) Work out the total cost of the tyre.

£
(3)

The value of a new car is £14 000

The value of the car depreciates by 20% per year.

(c) Work out the value of the car after 2 years.

£
(3)

(Total for Question 10 is 8 marks)



11 There are some pens in a bag.

36 of the pens are blue.

24 of the pens are black.

- (a) Write down the ratio of the number of blue pens to the number of black pens.
Give your ratio in its simplest form.

..... :
(2)

There are some books and comics in a box.

The total number of books and comics is 54

The ratio of the number of books to the number of comics is 1 : 5

- (b) Work out the number of books in the box.

.....
(2)

(Total for Question 11 is 4 marks)



12 Louis invested £6500 for 2 years in a savings account.

He was paid 4% per annum compound interest.

(a) How much did Louis have in his savings account after 2 years?

£
(3)

Hassan invested £2400 for n years in a savings account.

He was paid 7.5% per annum compound interest.

At the end of the n years he had £3445.51 in the savings account.

(b) Work out the value of n .

.....
(2)

(Total for Question 12 is 5 marks)



13 Work out $\frac{2}{3} \div \frac{7}{9}$

Give your fraction in its simplest form.

.....
(3)

(b) Work out $2\frac{1}{3} - 1\frac{2}{5}$

.....
(3)

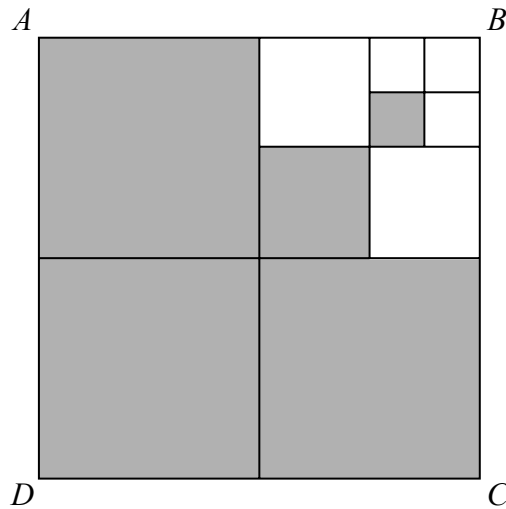
(Total for Question 13 is 6 marks)



14 (a) Write $\frac{7}{16}$ as a decimal.

(Total for Question 14 is 1 mark)

15 $ABCD$ is a square.
This diagram is drawn accurately.



What fraction of the square $ABCD$ is shaded?

(Total for Question 15 is 2 marks)



- 16** Write the following numbers in order of size.
Start with the smallest number.



0.61

0.1

0.16

0.106

.....
(Total for Question 16 is 1 mark)

- 17** Write 0.037 as a fraction.



.....
(Total for Question 17 is 1 mark)

- 18** Work out 15% of 80



.....
(Total for Question 18 is 2 marks)



19 (a) Work out $\frac{2}{7} + \frac{1}{5}$



.....
(2)

(b) Work out $1\frac{2}{3} \div \frac{3}{4}$

.....
(2)

(Total for Question 19 is 4 marks)

20 In a sale, normal prices are reduced by 20%.
The normal price of a coat is reduced by £15



Work out the normal price of the coat.

£.....

(Total for Question 20 is 2 marks)



21 Work out 6.34×5.2



(Total for Question 21 is 3 marks)



22 Write the following numbers in order of size, smallest first.

60.6 6.601 6.106 0.6 6.06

.....
smallest

(Total for Question 22 is 3 marks)

23 Nikki organised a wedding.

Guests had to choose their meal from pasta, chicken or beef.

- $\frac{1}{3}$ of the guests chose pasta.
- $\frac{5}{12}$ of the guests chose chicken.
- 24 of the guests chose beef.

How many guests were at the wedding?

.....

(Total for Question 23 is 4 marks)



- 24 Sophie took a maths test. She scored 28 marks out of 40.
Tara took an English test. She scored 32 marks out of 47.

Tara said

I did better than Sophie as I scored more marks.

By writing each score as a percentage, show that Tara is wrong.

(Total for Question 24 is 3 marks)

-
- 25 A shop has a sale that offers 20% off all prices.
On the final day they reduce all sale prices by 25%.

Esta buys a hairdryer on the final day.

Work out the **overall** percentage reduction on the price of the hairdryer.

..... %

(Total for Question 25 is 6 marks)



26 Write these in order, smallest first.

0.34 $\frac{1}{3}$ 3.5%

.....
smallest

(Total for Question 26 is 2 marks)

27 Carol drinks $\frac{3}{8}$ of a litre of milk each breakfast.

Milk costs 89p for a 2-litre carton and 49p for a 1-litre carton.

What is the smallest amount that Carol would have to spend to buy milk for one week?

Show your working.

£

(Total for Question 27 is 3 marks)



28



How many centimetres are there in 3.7 metres?

Circle your answer.

0.037

37

370

(1)

(Total for Question 28 is 1 mark)

29

Circle the fraction that is not equivalent to $\frac{3}{8}$

$\frac{6}{16}$

$\frac{9}{24}$

$\frac{12}{32}$

$\frac{15}{35}$

(1)

Here are some numbers.

9.6

12.6

15.4

7.6

12.4

17.4

Write the numbers in pairs so that the sum of the numbers in each pair is the same.

Answer _____ and _____

_____ and _____

_____ and _____

(Total for Question 29 is 3 marks)



30 Work out 51% of 400



(Total for Question 30 is 2 marks)

31 Write 180 g as a fraction of 3 kg.
Give your answer in its simplest form.

Answer _____

(Total for Question 31 is 2 marks)

32 Work out $2\frac{3}{4} \times 1\frac{5}{7}$

Give your answer as a mixed number in its simplest form.

Answer _____

(Total for Question 32 is 3 marks)



33 A gym has 275 members.

40% are bronze members.

28% are silver members.

The rest are gold members.

Work out the number of gold members.

Answer _____

(Total for Question 33 is 3 marks)

34 120 men and 80 women were asked if they drive to work.

Altogether $\frac{1}{4}$ of the people said yes.

$\frac{1}{3}$ of the men said yes.

What fraction of the women said yes?

Answer _____

(Total for Question 34 is 4 marks)



35 24 boys, 45 girls and 281 adults are the members of a tennis club. 50 more children join the club.
The number of girls is **now** 18% of the total number of members.
How many of the 50 children were **boys**?

Answer _____

(Total for Question 35 is 4 marks)

36 Circle the decimal that is closest in value to $\frac{2}{3}$

(1)

0.6

0.66

0.667

0.67

(Total for Question 36 is 1 mark)

37 In 1999 the minimum wage for adults was £3.60 per hour.
In 2013 it was £6.31 per hour.
Work out the percentage increase in the minimum wage.

Answer _____ %

(Total for Question 37 is 3 marks)

