

1MA1 Foundation themed papers: Manipulating fractions

Write your name here			
Surname	Other names		
Centre Number		Candidate Number	
Pearson Edexcel Level 1/Level 2 GCSE (9–1)			
Mathematics Manipulating fractions			
			Paper Reference 1MA1
You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.			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.*
- You must **show all your working.**
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.

Information

- The total mark for this paper is **37**. There are **14** questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by all students in the June 2017–November 2019 examinations.
- 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.

1MA1 Foundation themed papers: Manipulating fractions

1 Work out $\frac{1}{8}$ of 720

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

2 Here are four fractions.

$$\frac{2}{5} \quad \frac{11}{30} \quad \frac{1}{2} \quad \frac{7}{15}$$

Write these fractions in order of size.
Start with the smallest fraction.

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

1MA1 Foundation themed papers: Manipulating fractions

3 Here are four fractions.

$$\frac{3}{4}$$

$$\frac{5}{7}$$

$$\frac{19}{25}$$

$$\frac{11}{15}$$

Write the fractions in order of size.
Start with the smallest fraction.

.....
(Total for Question 3 is 2 marks)



4 Write the following fractions in order of size.
Start with the smallest fraction.

$$\frac{1}{3}$$

$$\frac{3}{4}$$

$$\frac{1}{4}$$

$$\frac{7}{12}$$

$$\frac{1}{2}$$

.....
(Total for Question 4 is 2 marks)

1MA1 Foundation themed papers: Manipulating fractions

5 $\frac{4}{5}$ of a number is 32.

Find the number.

.....
(Total for Question 5 is 2 marks)

1MA1 Foundation themed papers: Manipulating fractions



6 Here are some fractions.

$$\frac{9}{12} \quad \frac{6}{8} \quad \frac{18}{24} \quad \frac{10}{16} \quad \frac{15}{20}$$

One of these fractions is **not** equivalent to $\frac{3}{4}$

(a) Which fraction?

.....
(1)

(b) Work out $\frac{1}{12} + \frac{5}{6}$

.....
(2)

(Total for Question 6 is 3 marks)

1MA1 Foundation themed papers: Manipulating fractions



7

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

.....
(2)

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

Give your answer as a fraction in its simplest form.

.....
(2)

(Total for Question 7 is 4 marks)

1MA1 Foundation themed papers: Manipulating fractions



8

(a) Work out $\frac{5}{8} \div \frac{3}{4}$

.....
(1)

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

.....
(2)

(Total for Question 8 is 3 marks)

9 Jim thinks of a number.

$\frac{2}{3}$ of Jim's number is 48.

Work out $\frac{5}{6}$ Jim's number.

.....
(Total for Question 9 is 2 marks)

1MA1 Foundation themed papers: Manipulating fractions



10 Work out $1\frac{3}{4} - 1\frac{1}{3}$

Give your answer as a mixed number.

.....
(Total for Question 10 is 3 marks)



11 (a) Work out $2\frac{1}{7} + 1\frac{1}{4}$

.....
(2)

(b) Work out $1\frac{1}{5} \div \frac{3}{4}$

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

.....
(2)

(Total for Question 11 is 4 marks)

1MA1 Foundation themed papers: Manipulating fractions



12 Work out $2\frac{3}{5} - 1\frac{5}{6}$

.....
(Total for Question 12 is 3 marks)



13 Here are two fractions.

$$\frac{7}{5} \qquad \frac{5}{7}$$

Work out which of the fractions is closer to 1
You must show all your working.

(Total for Question 13 is 3 marks)

1MA1 Foundation themed papers: Manipulating fractions



14 (a) Work out $\frac{2}{5} + \frac{1}{4}$

.....
(2)

(b) Write down the value of 2^{-3}

.....
(1)

(Total for Question 14 is 3 marks)

TOTAL MARKS FOR PAPER: 37