

# Fractions and Recurring Decimals

Please write clearly in block capitals

Forename:

Surname:

## Materials

For this paper you must have:

- mathematical instruments



You must **not** use a calculator.

## Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer all questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

## Information

- The marks for questions are shown in brackets.
- You may ask for graph paper, tracing paper and more answer paper. These must be tagged securely to this answer book.

## Advice

- In all calculations, show clearly how you work out your answer.

**1(a)** Which of the following fractions results in a recurring decimal?

(Level 4)

[1 mark]

$$\frac{9}{12}$$

$$\frac{4}{6}$$

$$\frac{3}{15}$$

$$\frac{8}{16}$$

**1(b)** Which of the following decimals is the same as  $\frac{11}{12}$

[1 mark]

0.9

1.1

0.89

0.91 $\dot{6}$

**1(c)** Which of the following fractions is the same as 0.6 $\dot{6}$

[1 mark]

$$\frac{2}{13}$$

$$\frac{4}{9}$$

$$\frac{6}{9}$$

$$\frac{13}{50}$$

Turn over for next question

2 Find what  $\frac{7}{12}$  is as a recurring decimal

(Level 4)

[2 marks]

---

---

---

---

---

---

---

---

Answer \_\_\_\_\_

3  $\frac{1}{4}$  as a decimal is 0.25.

(Level 7)

Find the fraction which is equivalent to 0.25

[3 marks]

---

---

---

---

---

---

---

---

Answer \_\_\_\_\_

Turn over for next question

4 Find what  $0.\dot{1}35$  is as a fraction

(Level 7)

[3 marks]

---

---

---

---

---

---

---

Answer \_\_\_\_\_

5 Janet completes 4 steps out of 11 in order to unlock an achievement on her favourite app.

(Level 7)

What is the proportion of the achievement that Janet has completed as a recurring decimal.

[3 marks]

---

---

---

---

---

---

---

---

Answer \_\_\_\_\_

Turn over for next question

6 Terry is trying to answer the maths question shown below:

(Level 7)

“Find what  $0.8\dot{3}$  is as a fraction”

Terry’s workings are shown below:

$$\begin{array}{ll}
 \text{Step 1:} & 0.8\dot{3} = x \\
 \text{Step 2:} & 83.\dot{3} = 10x \\
 \text{Step 3:} & \begin{array}{r} 83.\dot{3} = 10x \\ - \quad 0.8\dot{3} = x \\ \hline 83 = 9x \end{array} \\
 \text{Step 4:} & \begin{array}{r} 83 - 9 = x \\ x = 74 \end{array}
 \end{array}$$

Describe what error(s) Terry has made.

Show the correct working to answer Terry’s exam question.

[3 marks]

---



---



---



---



---

Answer \_\_\_\_\_



## GCSE Maths Practice Exam Papers

- ✓ GCSE Maths predicted papers and mark schemes
- ✓ Paper 1, 2, 3 and mark scheme in every set
- ✓ All exam boards - AQA, OCR, Edexcel, WJEC

Get them at [mme.la/papers](https://mme.la/papers) or scan the barcode

