



3.2F Fractions: Foundation Tier Practice

EDEXCEL Edexcel 1MA1 · Calculator allowed · about 45 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

- 1** Write the fraction shown by the shaded part of this shape. A rectangle is split into 6 equal small rectangles; 2 of them are shaded.

(Total for Question 1 is 1 mark)

- 2** Write $\frac{4}{8}$ in its simplest form.

(Total for Question 2 is 1 mark)

- 3** Which fraction is equivalent to $\frac{3}{5}$? Circle one: $\frac{6}{10}$, $\frac{4}{6}$, $\frac{3}{8}$.

- ☐ $\frac{6}{10}$
☐ $\frac{4}{6}$
☐ $\frac{3}{8}$

(Total for Question 3 is 1 mark)

- 4** Work out $\frac{1}{4} + \frac{1}{4}$.

(Total for Question 4 is 2 marks)

- 5** Work out $\frac{5}{6} - \frac{1}{6}$.

(Total for Question 5 is 2 marks)

6 Write $\frac{7}{4}$ as a mixed number.

(Total for Question 6 is 2 marks)

7 Work out $2 \times \frac{3}{7}$.

(Total for Question 7 is 2 marks)

8 Work out $\frac{1}{3}$ of 36.

(Total for Question 8 is 3 marks)

9 A recipe needs $\frac{3}{4}$ litre of milk. Priya has a jug of 2 litres. How much milk remains after she uses the amount for the recipe?

(Total for Question 9 is 3 marks)

10 Work out $\frac{2}{5} + \frac{1}{3}$. Give your answer as a fraction in its simplest form.

(Total for Question 10 is 3 marks)

11 Work out $\frac{3}{8}$ of 64.

(Total for Question 11 is 4 marks)

12 Simplify $\frac{12}{18}$. Show your working.

(Total for Question 12 is 4 marks)

13 Amelia uses $1\frac{1}{2}$ packets of sugar to make 3 batches of cookies. How much sugar does she use for one batch? Give your answer as a fraction.

(a) Write $1\frac{1}{2}$ as an improper fraction. (2)

(b) Divide $\frac{3}{2}$ by 3 and give the answer in simplest form. (4)

(Total for Question 13 is 6 marks)

- 14** A cake is cut into 8 equal slices. Kwame eats 3 slices and Erin eats 2 slices. What fraction of the cake is left? Show your working and give the answer in simplest form.

(Total for Question 14 is 6 marks)

Mark scheme · 3.2F Fractions: Foundation Tier Practice

Question 1

- **B1** $\frac{2}{6}$ cao
- **Answer:** $\frac{2}{6}$

Question 2

- **B1** $\frac{1}{2}$ cao
- **Answer:** $\frac{1}{2}$

Question 3

- **B1** $\frac{6}{10}$ cao
- **Answer:** $\frac{6}{10}$

Question 4

- **M1** correct addition of numerators with common denominator, $\frac{1}{4} + \frac{1}{4} = \frac{2}{4}$ (ft)
- **A1** $\frac{1}{2}$ cao (or $\frac{2}{4}$ simplified)
- **Answer:** $\frac{1}{2}$

Question 5

- **M1** subtract numerators with common denominator $\frac{5}{6} - \frac{1}{6} = \frac{4}{6}$
- **A1** $\frac{2}{3}$ cao ($\frac{4}{6}$ simplified to $\frac{2}{3}$)
- **Answer:** $\frac{2}{3}$

Question 6

- **M1** divide 7 by 4 to get 1 remainder 3 (method shown or implied)
- **A1** $1 \frac{3}{4}$ cao
- **Answer:** $1 \frac{3}{4}$

Question 7

- **M1** multiply numerator by 2: $2 \times \frac{3}{7} = \frac{6}{7}$ or equivalent method
- **A1** $\frac{6}{7}$ cao
- **Answer:** $\frac{6}{7}$

Question 8

- **M1** correct method: divide 36 by 3 to find one third ($\frac{36}{3}$)
- **A1** 12 cao
- **B1** correct check: $12 \times 3 = 36$ or statement of answer
- **Answer:** 12

Question 9

- **M1** subtract $\frac{3}{4}$ from 2 by converting 2 to $\frac{8}{4}$ or similar method
- **A1** $\frac{5}{4}$ cao
- **B1** give mixed number $1 \frac{1}{4}$ or 1.25 as acceptable (awrt 1.25)
- **Answer:** $1 \frac{1}{4}$

Question 10

- **M1** find common denominator 15 and add: $\frac{2}{5} = \frac{6}{15}$, $\frac{1}{3} = \frac{5}{15}$
- **M1** add numerators to get $\frac{11}{15}$
- **A1** $\frac{11}{15}$ cao
- **Answer:** $\frac{11}{15}$

Question 11

- **M1** method: divide 64 by 8 to find $\frac{1}{8}$ or multiply $64 \times \frac{3}{8}$
- **M1** $\frac{1}{8}$ of 64 = 8
- **M1** $3 \times 8 = 24$ (or $64 \times \frac{3}{8} = 24$)
- **A1** 24 cao
- **Answer: 24**

Question 12

- **M1** divide numerator and denominator by a common factor, e.g. 6
- **M1** show $\frac{12}{18} = (\frac{12}{6})/(\frac{18}{6})$ or $\frac{2}{3}$ by method
- **A1** $\frac{2}{3}$ cao
- **B1** explicit working shown or equivalent explanation
- **Answer: $\frac{2}{3}$**

Question 13

- (a) **M1** convert mixed number to improper fraction shown
- (a) **A1** $\frac{3}{2}$ cao
- (a) **Answer: $\frac{3}{2}$**
- (b) **M1** method: divide by 3 is multiply by $\frac{1}{3}$, so $(\frac{3}{2}) \times (\frac{1}{3})$
- (b) **M1** cancellation or multiplication to get $\frac{3}{6}$
- (b) **A1** $\frac{1}{2}$ cao
- (b) **B1** working or simplified result shown
- (b) **Answer: $\frac{1}{2}$**

Question 14

- **M1** find total eaten: $3 + 2 = 5$ slices
- **M1** subtract eaten from 8: $8 - 5 = 3$ slices left
- **M1** write fraction of cake left as $\frac{3}{8}$
- **A1** $\frac{3}{8}$ cao
- **M1** show any check or state fraction cannot be simplified further
- **B1** clear working shown
- **Answer: $\frac{3}{8}$**