



2.4D Fractions of an Amount: Fluency and Exam Drill

EDEXCEL Edexcel 1MA1 · Calculator allowed · about 40 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

1 Work out $\frac{1}{4}$ of 28.

(Total for Question 1 is 1 mark)

2 Work out $\frac{3}{5}$ of 35.

(Total for Question 2 is 1 mark)

3 Work out $\frac{2}{3}$ of 15.

(Total for Question 3 is 1 mark)

4 Work out $\frac{3}{8}$ of £64. Give your answer in pounds.

(Total for Question 4 is 1 mark)

5 Work out $\frac{5}{6}$ of 18.

(Total for Question 5 is 1 mark)

6 A school received 48 new pens. Three quarters of the pens were given to Year 7. How many pens did Year 7 receive?

(Total for Question 6 is 2 marks)

- 7 A recipe needs $\frac{2}{5}$ of 400 g of sugar. Work out how many grams of sugar are needed.

(Total for Question 7 is 2 marks)

- 8 A box contains 30 postcards. $\frac{7}{15}$ of them are blank on the back. How many postcards are blank on the back?

(Total for Question 8 is 2 marks)

- 9 Priya ate $\frac{2}{5}$ of a cake. The part she ate weighed 160 g. Work out the weight of the whole cake in grams.

(Total for Question 9 is 2 marks)

- 10 A camera now costs £216 after a reduction to $\frac{3}{5}$ of its original price. Work out the original price of the camera.

(Total for Question 10 is 3 marks)

- 11 A 5-litre jug is used as follows. First $\frac{2}{5}$ of the jug is poured away. Then $\frac{1}{4}$ of the remaining liquid is poured away. Work out how many litres remain in the jug.

(Total for Question 11 is 3 marks)

- 12** Box A holds $\frac{3}{4}$ of 48 toy cars. Box B holds $\frac{5}{6}$ of 42 toy cars. Which box holds more cars?
Work out how many more cars it holds.

(Total for Question 12 is 3 marks)

- 13** A charity collected £420. They gave $\frac{2}{7}$ of the money to a food bank. From the remainder they gave $\frac{3}{10}$ to a school. Work out how much of the original money is left after these two donations.

(Total for Question 13 is 4 marks)

- 14** A baker used $\frac{3}{8}$ of his flour to make bread. He then used $\frac{5}{12}$ of the remaining flour to make pastries. After both processes 140 kg of flour remained. Work out the original mass of flour the baker had.

(Total for Question 14 is 4 marks)

Mark scheme · 2.4D Fractions of an Amount: Fluency and Exam Drill

Question 1

- **B1** 7 cao
- **Answer:** 7 g? (units not specified) 7 or simply 7 (cao). Please accept 7 as the numerical answer; no units were required in the question.

Question 2

- **B1** 21 cao
- **Answer:** 21

Question 3

- **B1** 10 cao
- **Answer:** 10

Question 4

- **B1** £24 cao
- **Answer:** £24

Question 5

- **B1** 15 cao
- **Answer:** 15

Question 6

- **M1** correct method for $\frac{3}{4}$ of 48, e.g. $48 \times \frac{3}{4}$ or $(48/4) \times 3$
- **A1** 36 cao
- **Answer:** 36

Question 7

- **M1** method: $\frac{2}{5}$ of 400, e.g. $400 \times \frac{2}{5}$ or $(400/5) \times 2$
- **A1** 160 g cao
- **Answer:** 160 g

Question 8

- **M1** method: $\frac{7}{15} \times 30$ or $(30/15) \times 7$
- **A1** 14 cao
- **Answer:** 14

Question 9

- **M1** method: divide 160 by $\frac{2}{5}$ or multiply by $\frac{5}{2}$
- **A1** 400 g cao
- **Answer:** 400 g

Question 10

- **M1** divide £216 by $\frac{3}{5}$ or multiply by $\frac{5}{3}$ to find original price
- **M1** calculate $216 \times \frac{5}{3}$ or $216 \div (\frac{3}{5})$ correctly
- **A1** £360 cao
- **Answer:** £360

Question 11

- **M1** calculate first amount removed: $\frac{2}{5}$ of 5 = 2 litres or find remainder 3 litres
- **M1** calculate second removal: $\frac{1}{4}$ of 3 = 0.75 litres
- **A1** 2.25 litres cao
- **Answer:** 2.25 litres

Question 12

- **M1** calculate $\frac{3}{4}$ of 48 = 36 or equivalent method
- **M1** calculate $\frac{5}{6}$ of 42 = 35 or equivalent method
- **A1** Box A has 1 more car
- **Answer: Box A, 1 more car**

Question 13

- **M1** calculate $\frac{2}{7}$ of 420 = 120 or equivalent method
- **M1** subtract to find remainder: $420 - 120 = 300$
- **M1** calculate $\frac{3}{10}$ of 300 = 90
- **A1** £210
- **Answer: £210**

Question 14

- **M1** find remainder after bread: $1 - \frac{3}{8} = \frac{5}{8}$ so remainder = $\frac{5}{8}x$
- **M1** find amount used for pastries: $\frac{5}{12}$ of $\frac{5}{8}x = \frac{25}{96}x$ and subtract to get final remainder $\frac{5}{8}x - \frac{25}{96}x = \frac{35}{96}x$
- **M1** set up and solve $\frac{35}{96}x = 140$ correctly
- **A1** 384 kg
- **Answer: 384 kg**