2.4 Fractions of an Amount: Test Pack

EDEXCEL 1MA1 · Calculator allowed · about 60 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 What is 1/2 of 18?

- ☐ A) 7
- ☐ B) 8
- ☐ C) 9
- ☐ D) 10

(Total for Question 1 is 1 mark)

2 A double maths lesson lasts 60 minutes. Work out 1/4 of 60 minutes. Give your answer in minutes.

(Total for Question 2 is 1 mark)

3 A box contains 35 chocolates. 1/5 of the chocolates are dark chocolate. Work out how many chocolates are dark chocolate.

(Total for Question 3 is 1 mark)

4 Show that 3/8 of 96 is equal to 36.

(Total for Question 4 is 2 marks)

© Revision Library | revisionlibrary.co.uk

5 A train journey is timetabled to take 1 hour. The train is delayed by 3/4 of an hour. Work out the total time for the journey. Give your answer in hours and minutes.

(Total for Question 5 is 3 marks)

---

6 Ahmed says that 2/5 of £60 is a greater amount of money than 3/8 of £40. Is Ahmed correct? You must show working to support your answer.

(Total for Question 6 is 3 marks)

---

7 Work out 1/5 of £25.

(Total for Question 7 is 2 marks)

---

8 Isla earns £40. Isla spends 1/2 of the money on rent. Isla then spends 1/5 of the money that is left on food. How much money does Isla have left?

(Total for Question 8 is 3 marks)

---

9 Beth earns £60. Beth spends 4/5 of the money on rent. Beth then spends 1/6 of the money that is left on food. How much money does Beth have left?

(Total for Question 9 is 3 marks)

© Revision Library | revisionlibrary.co.uk

10 Dina earns £30. Dina spends 1/2 of the money on rent. Dina then spends 1/5 of the money that is left on food. How much money does Dina have left?

(Total for Question 10 is 3 marks)

---

11 The diagram shows a strip of 12 equal parts. 8 of the parts are shaded grey. The strip represents all of the 156 cupcakes made for a school bake sale.



Strip represents all 156 cupcakes made for the bake sale

(a) Write down the fraction of the strip that is shaded, giving your answer in its simplest form. **(1)**

.....

(b) Work out the number of cupcakes represented by the shaded part of the diagram. **(2)**

.....

(Total for Question 11 is 3 marks)

---

12 A charity book sale raises £180. Ravi's class donates 3/10 of this amount to the local library. Work out how much money is donated to the library.

(Total for Question 12 is 2 marks)

© Revision Library | revisionlibrary.co.uk

13 A charity fun run raises £1250. 3/10 of the money is given to Fund A. 2/5 of the money is given to Fund B. The rest of the money is given to Fund C. Work out how much money is given to Fund C.

(Total for Question 13 is 4 marks)

---

14 A tank is full of water. 1/3 of the water is used on Monday. Of the water remaining after Monday, 1/4 is used on Tuesday. After Tuesday, 40 litres of water remain in the tank. Work out how many litres of water the tank contained when it was full.

(Total for Question 14 is 4 marks)

---

15 A box contains 30 postcards. 7/15 of them are blank on the back. How many postcards are blank on the back?

(Total for Question 15 is 2 marks)

© Revision Library | revisionlibrary.co.uk

16 Ibrahim was asked to work out 5/6 of 84. His working is shown below:

84 / 6 = 14

Ibrahim gave 14 as his final answer for 5/6 of 84. Ibrahim's answer is wrong.

(a) State the mistake that Ibrahim has made. **(1)**

(b) Work out the correct value of 5/6 of 84. **(2)**

.....

(Total for Question 16 is 3 marks)

---

17 A charity shop sold 2/5 of the books that had been donated to it. This left 138 books unsold. Work out how many books had been donated to the shop in total.

(Total for Question 17 is 3 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 2.4 Fractions of an Amount: Test Pack

Question 1

C) 9 **B1**

Answer: C) 9

Question 2

15 (minutes) cao **B1**

Answer: 15 minutes

Question 3

7 (chocolates) cao **B1**

Answer: 7 chocolates

Question 4

96 / 8 = 12 oe (dividing by the denominator) **M1**

cso, 12 x 3 = 36 shown, matching the given answer **A1**

Answer: 3/8 of 96 = 36 (shown)

Question 5

60 / 4 = 15 oe (dividing by the denominator, to find 1/4 of 60 minutes) **M1**

45 (minutes), the length of the delay, ft correct method **A1**

1 hour 45 minutes oe (e.g. 105 minutes), cao **A1**

Answer: 1 hour 45 minutes

Question 6

60 / 5 = 12, 12 x 2 = 24 oe, working out 2/5 of £60 **M1**

40 / 8 = 5, 5 x 3 = 15 oe, working out 3/8 of £40 **M1**

cao, correct conclusion that Ahmed is correct, since £24 is greater than £15 **A1**

Answer: Ahmed is correct: 2/5 of £60 = £24, which is greater than 3/8 of £40 = £15.

Question 7

£25 / 5 or equivalent **M1**

£5 cao **A1**

Answer: £5

Question 8

1/2 of 40 **M1**

40 - 20 or 1/5 of 20 **M1**

£16 cao **A1**

Answer: £16

Question 9

4/5 of 60 **M1**

60 - 48 or 1/6 of 12 **M1**

£10 cao **A1**

Answer: £10

Question 10

1/2 of 30 **M1**

30 - 15 or 1/5 of 15 **M1**

£12 cao **A1**

Answer: £12

Question 11

(a) 2/3 oe **B1**

(a) Answer: 2/3

(b) 156 / 12 = 13 oe (dividing by the denominator) **M1**

(b) 104 cao **A1**

(b) Answer: 104

Question 12

180 / 10 = 18 oe (dividing by the denominator) **M1**

54 (pounds) cao **A1**

Answer: £54

Question 13

1250 / 10 = 125, 125 x 3 = 375 oe, the amount given to Fund A **M1**

1250 / 5 = 250, 250 x 2 = 500 oe, the amount given to Fund B **M1**

375 + 500 = 875 (dep on both previous methods) **M1**

375 (pounds) cao **A1**

Answer: £375

Question 14

1 - 1/3 = 2/3 oe (the fraction of the tank remaining after Monday) **M1**

1 - 1/4 = 3/4 oe (the fraction of Monday's remainder left after Tuesday) **M1**

2/3 x 3/4 = 1/2 oe (dep on both previous methods, the fraction of the full tank left after Tuesday), or equivalent e.g. 40 x 2 **M1**

80 (litres) cao **A1**

Answer: 80 litres

Question 15

method: 7/15 x 30 or (30/15) x 7 **M1**

14 cao **A1**

Answer: 14

Question 16

(a) Ibrahim found one sixth of 84 (14) but did not multiply by the numerator, 5, to find five sixths oe **B1**

(a) Answer: Ibrahim found one sixth of 84 but did not multiply by the numerator, 5, to find five sixths of 84.

(b) 14 x 5 oe (dep, multiplying one sixth of 84 by the numerator) **M1**

(b) 70 cao **A1**

(b) Answer: 70

Question 17

1 - 2/5 = 3/5 oe (the fraction of books left unsold) **M1**

138 / 3 = 46 oe (dep, dividing by the numerator of 3/5 to find one fifth of the total) **M1**

230 cao **A1**

Answer: 230

© Revision Library | revisionlibrary.co.uk