

**M1.****Alternative method 1**

$$1700 \div (10 + 10 + 10 + 20)$$

or

$$1700 \div 50 \text{ or } 50x = 1700$$

or

$$34$$

oe

**M1**

$$3 \times \text{their } 34$$

**M1dep**

$$102$$

**A1****Alternative method 2**

Ratio 30 : 20 seen or implied

oe

**M1**

$$1700 \div 5 \times 3 \text{ or } 1020$$

$$\text{or } 1700 \div 5 \times 2 \text{ or } 680$$

oe

**M1dep**

$$102$$

**A1****Alternative method 3**

Chooses 10p and 20p coins in the ratio 3 : 1 and works out their total value

**M1**

Builds up to £10.20 and £6.80

M1dep

102

A1

[3]

M2.

(a)  $\frac{1}{3.5}$

M1

$\frac{2}{7}$

*oe fraction*

A1

(b) **Alternative method 1**

$120\ 000 \times (1 + 2.5)$

M1

420 000

A1

**Alternative method 2**

$120\ 000 \div \frac{\text{their 2}}{\text{their 7}}$

or

$120\ 000 \div \frac{\text{their 1}}{\text{their 3.5}}$

where fraction in (a) is of the form  $\frac{m}{n}$   
 $m > 1$

where fraction in (a) is of the form  $\frac{1}{n}$

M1

420 000

*ft their answer from part (a)*

A1ft

[4]

**M3.**

(a)  $720 \div 6$  or 120  
 $720 \div 6 \times 5$  or 600

M1

600 and 120

A1

**Additional Guidance**

120 and 600 (order reversed)

M1A0

(b)  $135 + 70 + 35$  or 240

M1

*their*  $240 \div 6$  or 40

M1dep

$2 \times$  *their* 40 or 80

M1dep

10

*ignore fw*

A1

**Additional Guidance**

Gemma 10, Beth 5, answer 15 scores full marks

M1M1M1A1

(120 and) 80 and 40 may be written next to the 3 : 2 : 1 in the question

M1M1M1A0

**Beware of 10 from incorrect working**

e.g.  $135 \div 3 = 45$ ,  $70 \div 2 = 35$ ,  $35 \div 1 = 35$ , answer 10 scores 0

M0M0M0A0

[6]

**M4.**

7 : 5

*B1 Any ratio equivalent to 7 : 5*

*or 5 : 7*

*or any ratio correctly simplified*

B2

[2]

**M5.**

(a)  $25(\%) : 75(\%)$

or  $\frac{1}{4} : \frac{3}{4}$

oe

M1

$1 : 3$

SC1  $3 : 1$

A1

(b)  $19.5 \div 3$

or  $26 \div 4$

or 6.5

oe

$19.5 \div 75 \times 25$

M1

6.50

*Correct money notation*

A1

**Additional Guidance**

Condone 6.50p on answer line provided £ sign is not crossed out

M1A1

[4]

**M6.****Alternative method 1**

$500 \times 10$  or 5000

M1

their  $5000 \div 1500$

*or repeated addition of 1500 (at least 3)**Allow their 5000 from  $500 \times 10$* *or  $500 \times 11$* 

M1

$3\frac{1}{3}$  or 3.3 (..)

*4500 or 6000*

*$3\frac{1}{3}$  or 3.3(..) can be implied by an an answer of 4 from correct working*

**A1**

4 (bottles)

*ft their fraction or decimal answer rounded up to nearest integer.*

*SC2 for 4 with no working or unsupported*

**B1 ft**

### **Alternative method 2**

$1500 \div 10$  or 150

*1 bottle of water is enough for 150 ml apple juice*

**M1**

$500 \div$  their 150

*or repeated addition of 150 (at least 3)*

*Allow their 150 from  $1500 \div 10$*

*or  $1500 \div 11$*

**M1**

$3\frac{1}{3}$  or 3.3 (..)

*450 or 600*

*$3\frac{1}{3}$  or 3.3(..) can be implied by an an answer of 4 from correct working*

**A1**

4 (bottles)

*ft their fraction or decimal answer rounded up to nearest integer.*

*SC2 for 4 with no working or unsupported*

**B1 ft**

**[4]**

**M7.(a)**  $300 \div 4$  or 75

or  $300 \times 1.5$

2 cakes =  $300 \div 2$  or 2 cakes = 150

or

12 cakes =  $300 \times 3$  or 12 cakes = 900

oe

*any correct scaling*

**M1**

450

**A1**

(b) (1.5 kg =) 1500 (g)

or 300 g = 0.3 kg or 150 g = 0.15 kg

*seen or implied*

**B1**

their  $1500 \div$  their 75

or 6 (+) 6 (+) 6 (+) 2

or  $5 \times 4$  or 4 (+) 4 (+) 4 (+) 4 (+) 4

oe

**M1**

20

*SC2 14 cakes from 1050g*

**A1**

**Alternative method**

(1.5 kg =) 1500 (g)

or 300 g = 0.3 kg or 150 g = 0.15 kg

*seen or implied*

B1

Build up method to total number of cakes from their 1500 with one error

*build up values if correct:*

4 cakes = 300(g)

8 cakes = 600(g)

12 cakes = 900(g)

16 cakes = 1200(g)

M1

20

SC2 14 cakes from 1050g

A1

**Additional Guidance**

1500(g)

4 cakes = 300(g)

8 cakes = 600(g)

16 cakes = 900(g) (one error)

24 cakes = 1500(g)

Answer 24 cakes

is B1M1A0

1000(g) uses incorrect total of flour (misread)

4 cakes = 300(g)

8 cakes = 600(g)

12 cakes = 900(g)

Answer 12 cakes (one error – should be 13 cakes)

is B0M1A0

**[5]****M8.Packs of 6/Packs of 2**

$1.38 \times 3$

oe

$4.17 \div 3$

M1

4.14

oe  
1.39

A1

2 pack identified

*Strand (iii)*  
*ft their values provided method mark has been awarded*

Q1ft

**Alternative Method 1**    Scaling (multiples of 6)

1.38 × 6 **and** 4.17 × 2  
oe

M1

8.28 **and** 8.34

oe

A1

2 pack identified

*Strand (iii)*  
*ft their values provided method mark has been awarded*

Q1ft

**Alternative Method 2**    Price per roll

1.38 ÷ 2 **and** 4.17 ÷ 6  
oe

M1

0.69 **and** 0.695

oe  
*Accept 0.69 **and** 0.7(0)*

A1

2 pack identified



*Strand (iii)**ft their values provided method mark has been awarded***Q1ft****Alternative Method 3** Rolls per £

$2 \div 1.38$  and  $6 \div 4.17$

**M1**

1.44... and 1.43...

**A1**

2 pack identified

*Strand (iii)**ft their values provided method mark has been awarded***Q1ft****Alternative Method 4** Comparing proportions

$4.17 \div 1.38$  and  $6 \div 2$

$1.38 \div 4.17$  and  $2 \div 6$

**M1**

3.02 and 3

0.330... or 0.331 and 0.333...

**A1**

2 pack identified

*Strand (iii)**ft their values provided method mark has been awarded***Q1ft****Additional Guidance**

Ignore any units throughout, e.g. 0.69p and 0.695p

Students can scale up to any multiple of 6, e.g. 12, 18, 24, etc.

Scale up to 18:

$$1.38 \times 9 \text{ and } 4.17 \times 3$$

M1

12.42 and 12.51

A1

2 pack identified

Q1

Scale up to 24:

$$1.38 \times 12 \text{ and } 4.17 \times 4$$

M1

16.56 and 16.68

A1

2 pack identified

Q1

Alternative method 5:

$$1.38 \times 2 = 2.76 \text{ and } 4.17 - 2.76$$

M1

1.41

A1

2 pack identified

Q1

The Q mark can be awarded if the candidate has scored M1 and has made a correct comparison from their two values

**Pack of 2 identified with no correct working scores no marks**

[3]

**M9.**  $\frac{4860}{5 + 4 + 3}$  or 405

or  $\frac{5}{12}$  or  $\frac{4}{12}$  or  $\frac{3}{12}$

M1

2025 or 1620 or 1215

A1

2025 and 1620 and 1215

*Must be in correct order*

A1

**Additional Guidance**

**ANSWERS MUST BE IN THE CORRECT ORDER**

**BEWARE:**

4860/5 = 972, 4860/4 = 1215, 4860/3 = 1620 which gives two correct answers in the wrong order, so answers must be from correct working (972 flags up an incorrect method)

M0A0A0

[3]

**M10.**

(a)  $280 \div 4$

M1

Kiwi = 70

A1

Yogurt = 210

*ft 280 – their 70. Allow their 70 x 3 if M1 awarded  
SC1 for 35 and 105*

A1ft

(b)  $72 \times \frac{30}{100}$  (= 21.6)

M1

72 + their 21.6 or 22

M1Dep

93.6 or 94

A1

94 pence or £0.94

*Strand (i) – Correct money notation  
ft their 93.6 rounded to nearest integer*

Q1

**Alternative**

1.3 seen

M1

$72 \times 1.3$

M1

93.6 or 94

A1

94 pence or £0.94

*Strand (i) – Correct money notation  
ft their 93.6 rounded to nearest integer  
SC3 for 93p with no working*

Q1

[7]

**M11.**

(a)  $280 \div 4$

M1

Kiwi = 70

A1

Yogurt = 210

*ft 280 – their 70.  
Allow their  $70 \times 3$  if M1 awarded  
SC1 for 35 and 105*

A1ft

(b)  $\frac{1}{4 + 1 + 3} \times 100$

$$\text{oe } \frac{70}{280 + 70 + 210} \times 100$$

*ft their weights*

M1

12.5

*ft their weights*

A1 ft

(c) (i)  $72 \times \frac{30}{100} (= 21.6)$   
oe

M1

72 + their 21.6 or 22

M1 Dep

93.6

A1

94 pence or £ 0.94

*Strand (i) – Correct money notation*

*ft their 93.6 rounded to nearest integer*

Q1

**Alternative**

1.3 seen

M1

72 × 1.3

M1

93.6 or 94

A1

94 pence or £0.94

*Strand (i) – Correct money notation ft their 93.6 rounded to nearest integer*

*SC3 for 93p with no working*

Q1

(ii)  $0.4 \times 15 (= 6)$

*78 implies this mark*

M1

$$\frac{\text{their } 6}{72} \times 100 \text{ or } \frac{78}{72} \times 100$$

$$\frac{15}{72} \times 100 (= 20.83) \text{ and}$$

$$\frac{15+6}{72} \times 100 (= 29.16)$$

M1

8.3....

A1

Organised response

*Strand (ii) – present a logical mathematical argument with key steps clearly shown*

*Dep on M2 awarded*

Q1

[13]