# Q1.

A book has 276 pages.

Amina has read  $\frac{1}{3}$  of the book.

How many pages are left for Amina to read?



# Q2.

Here are the ingredients for chocolate ice cream.

cream	400 ml
milk	500 ml
egg yo <mark>l</mark> ks	4
chocolate	120 g
sugar	100 g



Stefan has only 300 ml of cream to make chocolate ice cream.

How much chocolate should he use?

Show your method						
method					g	

2 marks

#### Q3.

The numbers in this sequence increase by equal amounts each time.

Write in the three missing numbers.



<sup>2</sup> marks

## Q4.

In this diagram, the number in each box is the **sum** of the two numbers below it.

Write the missing numbers.



2 marks

# Q5.

Amy did a survey of what time people get up on a Sunday morning.

This table shows her results for 150 people.

Time	number of people
before 7 am	13
7:00 am to 7:59 am	28
8:00 am to 8:59 am	59
9:00 am to 9:59 am	36
10 am and after	14

Look at the table.

How many people get up at 8 am or later?



Amy says,

#### 'Two-thirds of the 150 people in the survey get up before 9 am.'

Amy is correct.

Explain how you know.



Q6.



£

1 mark

2 marks

# Q7.

Karen makes a fraction using two number cards.



She says,

# 'My fraction is equivalent to $\frac{1}{2}$ One of the number cards is 6'

What could Karen's fraction be?

Give both possible answers.



Q8.

Complete these fractions to make each equivalent to  $\frac{3}{5}$ 



1 mark

# Q9.

Three children do a sponsored silence.



This is a chart of the money they collected.



Estimate how much Sheena collected.



1 mark

Together Gary and Pip collected more than £60

Explain how the **chart** shows this.



# Q10.

This diagram shows the proportions of waste by weight a family throws away in one year,



 $2\frac{3}{4}$ 

Q11.

Q12.

Estimate what fraction of the waste is organic.

The family throws away about **35 kilograms of plastic** in a year.

Use the diagram to estimate the weight of **glass and metal** they throw away.



70% of this is newspapers.

What is the weight of **newspapers**?

How many quarters are there in



2 marks



1 mark

1 mark



kg

Write the missing numbers.

One is done for you.

Improper fraction	Mixed number
<u>7</u> 4	$1\frac{3}{4}$
2	5 <u>1</u>
<u>17</u> 5	3 5

2 marks

# Q13.

Write the missing fractions.



# Q14.

Join pairs of equivalent fractions.

One is done for you.



-				
2	m	а	rks	S

#### Q15.

Write the two missing values to make these equivalent fractions correct.



2 marks

1 mark

# Q16.

How many halves are there in 15?



# Q17.

Write these numbers in order of size, starting with the smallest.

1.9 0.96 1.253 0.328



# Q18.

Circle two numbers that add together to equal 0.25

0.05 0.25 0.2 0.5	0.05	0.23	0.2	0.5
-------------------	------	------	-----	-----

1 mark

#### Q19.

Write the missing number.



1 mark

1 mark

# Q20.

Write these numbers in order, starting with the **smallest**.



Q21.

Large pizzas cost £8.50 each.

Small pizzas cost £6.75 each.

Five children together buy one large pizza and three small pizzas.

They share the cost equally.

How much does each child pay?

Show your method						
				£		-

2 marks

#### Q22.

One gram of gold costs £32.94

What is the cost of half a kilogram of gold?



2 marks

# Q23.

Here is a number pyramid.

The number in a box is the **product** of the two numbers below it.

Write the missing numbers.



2 marks

#### Q24.

Two decimal numbers add together to equal 1

One of the numbers is 0.007

What is the other number?



# Q25.

The number 7.5 is halfway between 5 and 10



Write in the missing numbers.



1 mark



1 mark

# Q26.

Write these numbers in order, starting with the smallest.



#### Q27.

Here are five number cards.



Use four of the cards to complete these calculations.



1 mark

# Q28.

Here are four digit cards.



Use each digit card once to make the decimal number nearest to 20



#### Q29.

This scale shows the dates of floods and the height of the water in the floods.



How high was the water in the 1955 flood?

m

1 mark

How much higher was the water in the 1969 flood than in the 1948 flood?

m

1 mark

# Q30.

Forest School sells badges for charity.



For each badge sold, £1.20 is given to a charity.

How much does the charity get when 12 badges are sold?



Q31.

Tick ( $\checkmark$ ) the **two** numbers which have a total of **10** 

If the charity got £24, how many badges were sold?



1 mark

#### Q32.

Here are three supermarket bills.



Tom rounds each bill to the nearest £10 and then adds them up.

What is the total amount that Tom gets?



Mary adds up the three bills **exactly**.

What is the total difference between her total and Tom's total?

Show your method									

2 marks

#### Q33.

This scale shows the weight of Fred's cat.



What is the weight of Fred's cat?



1 mark

This scale shows the weight of Fred's dog





How much more does Fred's dog weigh than his cat?



# Q34.

Write the **same** number in each box to make this correct.



# Q35.

Write these numbers in order.

One has been done for you.



1 mark

## Q1.

Award TWO marks for the correct answer of 184

If the answer is incorrect, award **ONE** mark for:

• sight of 92

#### OR

• evidence of appropriate method, e.g.

$$\frac{1}{3} \times 276 = 92$$

• 276 ÷ 3 = 92 276 - 92 =

Answer need not be obtained for the award of **ONE** mark.

Up to 2 marks

#### Q2.

Award **TWO** marks for the correct answer of 90g.

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g:

$$300 \div 400 = \frac{3}{4}$$
$$\frac{3}{4} \times 120$$

Answer need not be obtained for the award of **ONE** mark.

Up to 2

[2]

[2]

#### Q3.

Award **TWO** marks for the sequence completed correctly as shown:



If the answer is incorrect, award **ONE** mark for two numbers correct.

Up to 2

Q4.

(a) 
$$6\frac{1}{4}$$

Accept equivalent fractions.  
Do not accept 
$$5\frac{5}{4}$$
  
(b)  $1\frac{1}{2}$   
Accept equivalent fractions, eg  
 $1\frac{2}{4}, \frac{3}{2}, 1.5, 150\%$   
(a) 109  
(b) An explanation that recognises that 100 people get up before 9am which is two-thirds of the total (150).  
(c)  $1\frac{1}{2}$   
(c)  $1\frac{1}{2}$   
(c)  $109$   
(c)  $100$   
(c)  $109$   
(c)  $109$ 

• (13 + 28 + 59 = 100 which is two-thirds of the total)

• 
$$\frac{1}{3}$$
 of 150 = 50 and 2 × 50 = 100'

\_\_\_\_\_<sup>2</sup> '<sup>3</sup> of 150 is 100'

#### ■ '36 + 14 = 50 which is one-third after 9am'

Do not accept vague or incomplete explanations, eg:

- 'One-third are 9 o'clock or later'
- '100 got up at 9am'
- *'Twice as many got up before 9am.'*
- '13 + 28 + 59 = 100'

U1

[2]

[1]

#### Q6.

£11.25

# Q7.

Award **TWO** marks for both fractions correct as shown:



If the answer is incorrect, award **ONE** mark for one fraction correct. Accept fractions written in either order.

Up to 2

#### Q8.

Fractions completed as shown below:



All three fractions must be correct for the award of the mark.

(a) Answer in the range of £43 to £44 inclusive.

- 1
- (b) Explanation which implies that Gary has an amount greater than £25 but less than £27.50 and that Pip has £35±1, so that their total is greater than £60, eg
  - 'Gary has 26 Pip has 35';
  - 'The chart shows that Gary has 2 and <sup>2</sup>/<sub>3</sub> and Pip has 3 and a half, so that's over 60 pounds';
  - 'The whole symbols together make 50 and then it's 2 halves and Pip has half and Gary has more than half'.

Do not accept vague or arbitrary answers, eg

- 'By the number of coins';
- 'There are 5 ten pounds and 2 halves';
- 'A coin = 10 pounds and a broken coin = a fraction of a coin so a fraction of the money'.

[2]

#### Q10.

(a) An answer in the range 1/5 to 3/10 OR 20% to 30% OR 0.2 to 0.3 INCLUSIVE.

Numbers in range 20 to 30 must have % sign, eg:

• Do not accept '25'

1

1

[1]

[2]

- (b) An answer in the range 15 to 25 kg INCLUSIVE.
- (c) Award **TWO** marks for correct answer of 91 kg.

If answer is incorrect, award **ONE** mark for appropriate calculation, eg:

- 70/100 × 130 = wrong answer;
- 10% is 13 so 70% 7 x 313 = wrong answer.
- H + 2H + H + 2H = 126
- 20 + 40 + 20 + 40 = 120
   A calculation **MUST** be performed for award of one mark.
   '70/100 × 130' alone is insufficient for award of one mark.

Up to 2

1

1

1

1

1

#### Q11.

11 quarters

#### Q12.

11	
 2	_



Q13.

$$\frac{5}{10}$$
 or  $\frac{1}{2}$  (or equivalent)  
 $\frac{4}{12}$ ,  $\frac{2}{6}$  or  $\frac{1}{3}$  (or equivalent)

Q14.

Award **TWO** marks for three correct pairs joined, as shown.

[1]

[4]

[2]

[2]



#### Q15.

$\frac{25}{30}$	
30	1
30 36	
36	1

[2]

[1]

[1]

[2]

# Q16.

30

# Q17.

Numbers in order as shown:

0.328	0.96	1.253	1.9
	L		

#### Q18.

Numbers circled as shown:

0.23 0.5 0.05 0.2

Accept alternative unambiguous positive indications, e.g. numbers ticked or underlined.

[1]

[1]

# Q19.

20

# Q20.

Numbers in order, as shown:

0.098 0.607 0.7	4.003 5.6
-----------------	-----------

#### Q21.

Award TWO marks for the correct answer of £5.75

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g:

•  $\pounds 6.75 \times 3 = \pounds 20.25$  $\pounds 20.25 + \pounds 8.50 = \pounds 28.75$  $\pounds 28.75 \div 5$ 

Answer need not be obtained for the award of **ONE** mark.

Up to 2

# Q22.

Award TWO marks for the correct answer of £16,470

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g:

•  $\pounds 32.94 \times 1000 = \pounds 32,940$  $\pounds 32,940 \div 2$ 

OR

- £32.94 × 500
  - $= £3294 \times 5$

Answer need not be obtained for the award of **ONE** mark.

Up to 2

[2]

#### Q23.

Award TWO marks for three numbers correctly placed.



If the answer is incorrect award  $\ensuremath{\textbf{ONE}}$  mark for two numbers correctly placed.

**Commentary:** This question involves multiplying and dividing decimals where the answer has up to two decimal places (6F9).

	Up to 2	[2]
<b>Q24.</b> 0.993		[1]
Q25. (a) 4.9 Accept equivalent fractions and decimals	1	
(b) $-0.5$ Accept $-\frac{1}{2}$	1	
<b>Q26.</b> Numbers in order, as shown:		[2]
1.28 1.8 8.118 8.12 8.2		[1]
Q27. $47 \div 100 = 0.47$ AND		
4.07 × <b>10</b> = <b>40.7</b> Numbers within calculations may be given in either order.		[1]

#### Q28.

19.42

#### Q29.

(a)	Answer in the range 1.85 to 1.95 exclusive.	1	
(b)	1.8		

[1]

[2]

[2]

[1]

1

1

1

#### Q30.

(a)	£14.40	<b>Do not</b> accept £14.4	
			1
(b)	20		
(0)	20		
		Do not accept £20	

# Q31.

Two cards ticked as shown:



Accept alternative unambiguous indications such as circling or a line joining the correct pair of cards.

#### Q32.

(a) £200

(b) Award **TWO** marks for the correct answer of 37p **OR** £0.37

#### OR

for finding the correct difference between £199.63 and the answer given for 13a Answer to (a) must be a multiple of £10 for the award of **TWO** follow-through marks.

If the answer is incorrect, award ONE mark for evidence of appropriate method, eg

74.68 + 65.90 + 59.05 = 199.63

200 - 199.63

#### OR

for evidence of an appropriate method to find the correct difference between  $\pounds$ 199.63 and the answer given for (a).

Answer need not be obtained for the award of **ONE** mark. Accept for **ONE** mark £37p **OR** 0.37p **OR** £37 as evidence of appropriate method.

Up to 2

1

#### Q33.

- (a) 4.4
- (b) 1.2

#### OR

for finding the correct difference between 5.6 and the answer given for part (a) 1

[2]

[3]

# Q34.

Boxes completed as shown:



# [1]

#### Q35.

All four numbers correctly placed as shown:

Γ		
	3.3	largest
	3.23	
	3.2	
	3.03	
	3	smallest

All four numbers must be placed correctly for the award of the mark.

Transcription errors are acceptable only if they do not