

**Q1.** Frankie says that  $15 - 3 \times 2 = 24$ .

Frankie is wrong.  
Explain why.

.....

(Total 1 mark)

**Q2.** (a) Write these numbers in order of size.  
Start with the smallest number.

-5    3    -1    0    8

.....

(1)

(b) Work out  $7 + 3 \times 5$

(1)

(Total 2 marks)

**Q3.** (a) Write the number **three thousand four hundred and twenty five** in figures.

.....

(1)

(b) Write down the value of 4 in the number 2840.

.....

(1)

(c) Write the number 279 to the nearest hundred.

.....

(1)

(Total 3 marks)

**Q4.** Here is a list of numbers.

3    8    11    25    33    41

Write down a number from the list which is

(a) an even number,

.....

(1)

(b) a square number,

.....

(1)

(c) a multiple of 11

.....

(1)

(Total 3 marks)

**Q5.** There were 34 coins in a bag.  
Jim took 15 coins out of the bag.

Rose put 17 coins into the bag.

How many coins are now in the bag?

.....

(Total 2 marks)

**Q6.** The table shows temperatures at midnight and midday on one day in five cities.

City	Midnight temperature	Midday temperature
Belfast	-3 °C	4 °C
Cambridge	-1 °C	4 °C
Edinburgh	-7 °C	-1 °C
Leeds	-6 °C	3 °C
London	-2 °C	6 °C

(a) Which city had the lowest midnight temperature?

.....

(1)

(b) How many degrees higher was the midnight temperature in Cambridge than the midnight temperature in Leeds?

..... °C

(1)

(c) Which city had the greatest rise in temperature from midnight to midday?

.....

(1)  
(Total 3 marks)

**Q7.** (a) Work out  $400 - 193$ .

.....

(2)

(b) Work out  $4 - 9$ .

.....

(1)

(c) Work out  $-3 \times 5$ .

.....

(1)

(d) Work out  $300 \div 50$ .

.....

(1)  
(Total 5 marks)

**Q8.** At midnight the temperature was  $-9^{\circ}\text{C}$ .  
By 10 am, the temperature had risen by  $8^{\circ}\text{C}$ .

(a) Work out the temperature at 10 am.

..... $^{\circ}\text{C}$

(1)

At midday the temperature was  $5^{\circ}\text{C}$ .

(b) Work out the difference between the temperature at midnight and the temperature at midday.

..... $^{\circ}\text{C}$

(2)

On another day

the temperature at midnight was  $-7^{\circ}\text{C}$ ,  
the temperature at 10 am was  $-1^{\circ}\text{C}$  and  
the temperature at midday was  $3^{\circ}\text{C}$ .

Jenny says that, on this day, the temperature at 10 am is halfway between the temperatures at midnight and at midday.

(c) Is Jenny correct?  
You must give a reason for your answer.

.....  
.....  
.....

(2)

(Total 5 marks)

**Q9.** (a) Write the number **three thousand one hundred and nine** in figures.

.....

**(1)**

(b) Write down the value of the 6 in the number 23.469

.....

**(1)**

(c) Write the number 4261 correct to the nearest hundred.

.....

**(1)**

**(Total 3 marks)**

**Q10.** Work out  $342 \times 24$ .

.....

(Total 3 marks)

**Q11.** (a) Work out  $90 \div 10$

.....

(1)

(b) Write these numbers in order of size.  
Start with the smallest number.

2.8      4.71      0.6      13.4

.....

(1)

- (c) Write  $1\frac{7}{10}$  as a decimal.

.....

(1)  
(Total 3 marks)

- Q12.** Beth is planning a trip for a group of 36 people.  
The group can go to a theme park **or** to a concert.

If they go to the concert, they will go by train.  
If they go to the theme park, they will go by coach.

Beth has information about the costs.

**Theme Park Ticket Prices**  
£9 per person  
or £6.50 per person  
in a group of 10 or more people

**Coach Hire**  
24 seats    £260  
40 seats    £320  
54 seats    £410

**Concert Ticket Price**  
£7.50

**Return Train Fares**  
£8.25 each  
or  
£26.50 for each group of 4 people

What is the least possible total cost of the trip?  
You must show all your working.



(Total 5 marks)

**Q13.** Jemilla goes swimming.

She swims 64 lengths of a swimming pool.

Each length is 25 m long.

(a) Work out how far Jemilla swims.

Give your answer in kilometres.

..... kilometres

(3)

The swimming pool is 25 m long by 10 m wide by 2.5 m deep.

(b) How many litres of water does it contain?

..... l

(3)  
(Total 6 marks)

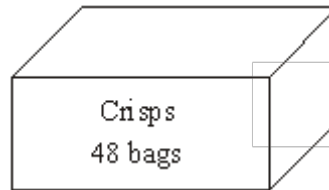
##

Jan bought 3 boxes of Salt 'n' Vinegar crisps and 2 boxes of Ready Salted crisps to sell at the Year 11 disco.

There are 48 bags of crisps in each box.

At the end of the disco there were 25 bags of crisps left.

How many bags of crisps were sold at the disco?



..... Bags

(Total 3 marks)

**Q15.** The table gives information about the temperatures at midnight on New Year's Eve in 5 capital cities.

City	Temperature
London	$-3^{\circ}\text{C}$
Madrid	$7^{\circ}\text{C}$
Oslo	$-11^{\circ}\text{C}$
Washington DC	$1^{\circ}\text{C}$
Wellington	$14^{\circ}\text{C}$

In Oslo, the temperature dropped by 8 degrees from midday to midnight.

- (a) What was the temperature in Oslo at midday?

.....

(1)

At midnight on New Year's Eve in Paris, the temperature was halfway between the temperature in London and the temperature in Madrid.

- (b) What was the temperature in Paris?

You must show your working.

.....

(2)

(Total 3 marks)

**Q16.** The table shows the temperatures in three cities at noon one day.

Oslo	New York	Cape Town
$-13^{\circ}\text{C}$	$-5^{\circ}\text{C}$	$9^{\circ}\text{C}$

- (a) Work out the difference in temperature between Oslo and New York.

.....  $^{\circ}\text{C}$

(1)

- (b) Work out the difference in temperature between Cape Town and Oslo.

.....  $^{\circ}\text{C}$

(1)

(Total 2 marks)

- Q17.** (a) Write these numbers in order of size.  
Start with the smallest number.

17    6    168    24

.....

(1)

- (b) Write these numbers in order of size.  
Start with the smallest number.

1.8    3.71    0.5    12.4

.....

(1)

(Total 2 marks)

**Q18.** (a) Work out  $2 \times (11 + 9)$

.....

(1)

(b) Work out  $3 \times 5 + 4$

.....

(1)

(c) Work out  $20 - 5 \times 3$

.....

(1)

(Total 3 marks)

**Q19.** (a) Write the number **nine thousand, three hundred and seventy four** in figures.

.....

(1)

(b) Write the number 62 500 in words.

.....

(1)

(c) Write down the value of the **8** in the number 3285

.....

(1)

(d) Write the number 2174 to the nearest hundred.

.....

(1)

(e) Write the number 7362 to the nearest thousand.

.....

(1)

(Total 5 marks)

**Q20.**

City	Temperature
Cardiff	-2 °C
Edinburgh	-4 °C
Leeds	2 °C
London	-1 °C
Plymouth	5 °C

The table gives information about the temperatures at midnight in 5 cities.

(a) Write down the lowest temperature.

..... °C

(1)

- (b) Work out the difference in temperature between Cardiff and Plymouth.

..... °C

(1)

- (c) Work out the temperature which is halfway between  $-1^{\circ}\text{C}$  and  $5^{\circ}\text{C}$ .

..... °C

(1)

(Total 3 marks)

- Q21.** (a) Write the number 4117 in words.

.....

(1)

- (b) Write the number 4117 to the nearest hundred.

.....

(1)

(Total 2 marks)

**Q22.**

A bus seats 47 people.  
Another 6 people can stand.

There are 44 people on the bus.  
The bus stops.

8 people get off the bus.  
19 people want to get on the bus.



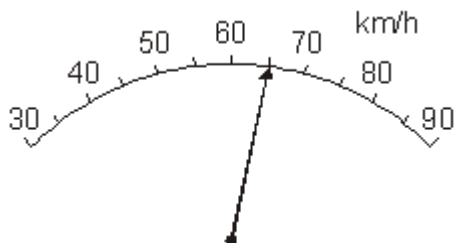
Can the bus hold all the people who want to get on the bus?

Explain your answer.

(Total 2 marks)



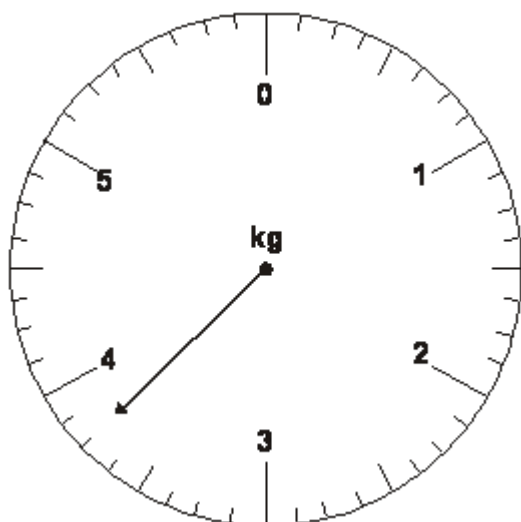
**Q23.** (a) Write down the reading on this scale.



..... km/h

(1)

The scale shows the weight of Sam's dog.



Sam's baby brother weighs 5 kg.

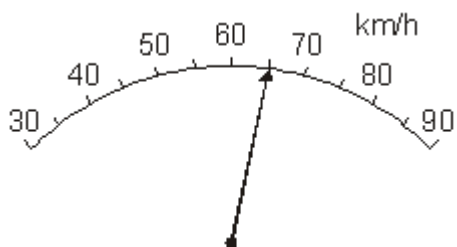
(b) Work out the difference in weight between Sam's baby brother and Sam's dog.

..... kg

(2)

(Total 3 marks)

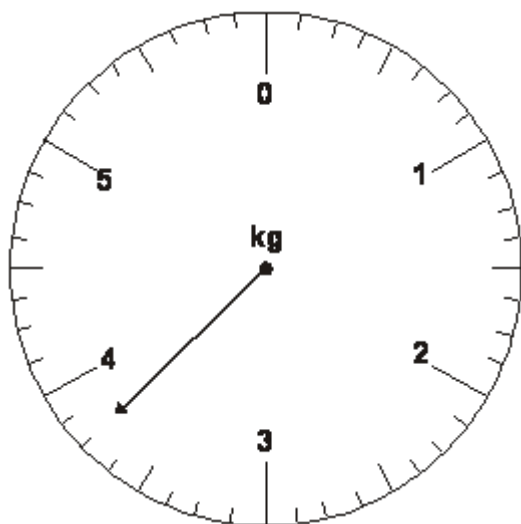
**Q24.** (a) Write down the reading on this scale.



..... km/h

(1)

The scale shows the weight of Sam's dog.



Sam's baby brother weighs 5 kg.

(b) Work out the difference in weight between Sam's baby brother and Sam's dog.

..... kg

(2)

(Total 3 marks)

**Q25.**

A bus seats 47 people.  
Another 6 people can stand.

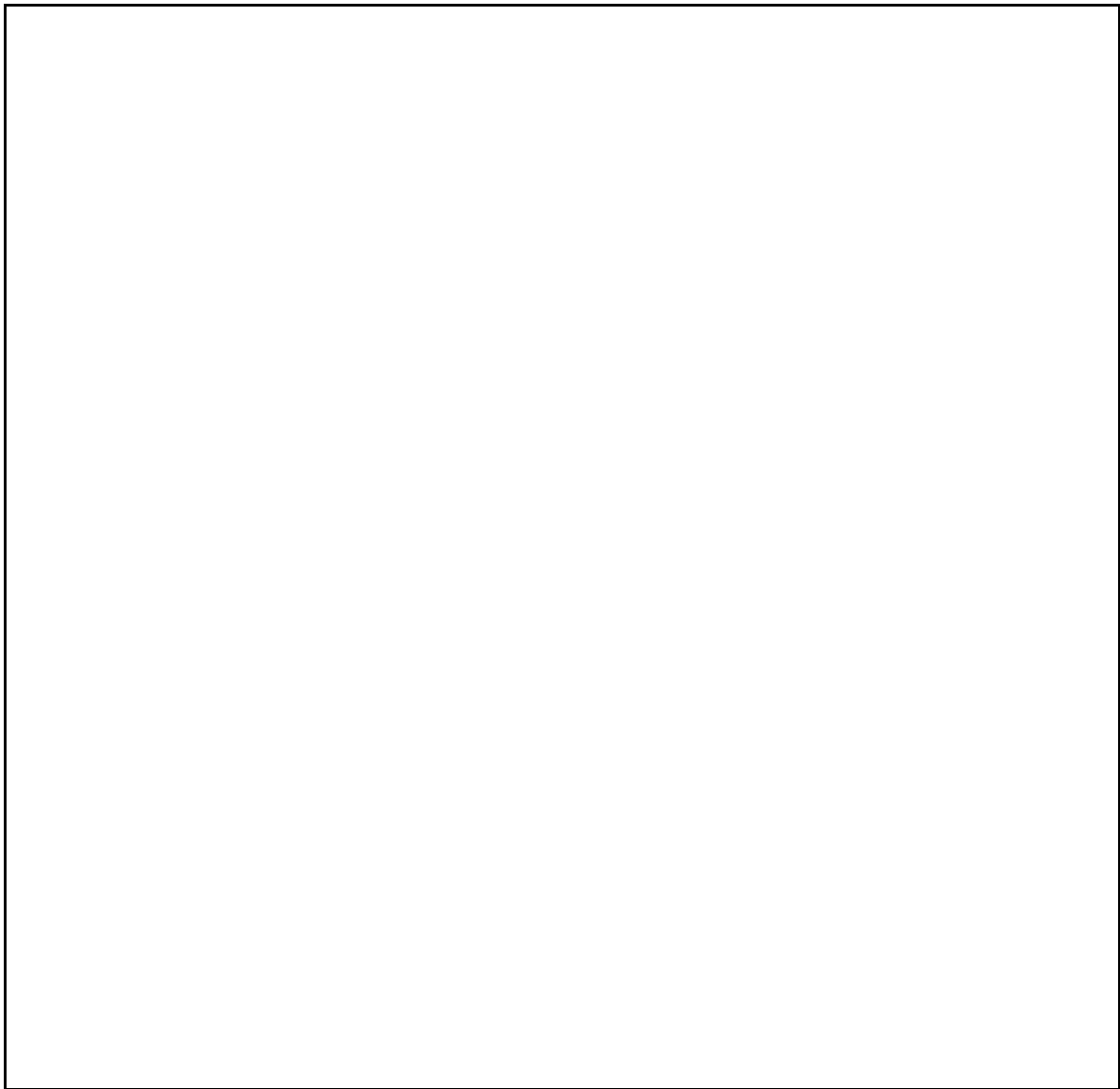
There are 44 people on the bus.  
The bus stops.

8 people get off the bus.  
19 people want to get on the bus.

Can the bus hold all the people who want to get on the bus?



Explain your answer.



**(Total 2 marks)**

**Q26.** (a) Write the number 4117 in words.

.....

**(1)**

(b) Write the number 4117 to the nearest hundred.

.....

(1)  
(Total 2 marks)

Q27.

City	Temperature
Cardiff	$-2\text{ }^{\circ}\text{C}$
Edinburgh	$-4\text{ }^{\circ}\text{C}$
Leeds	$2\text{ }^{\circ}\text{C}$
London	$-1\text{ }^{\circ}\text{C}$
Plymouth	$5\text{ }^{\circ}\text{C}$

The table gives information about the temperatures at midnight in 5 cities.

- (a) Write down the lowest temperature.

.....  $^{\circ}\text{C}$

(1)

- (b) Work out the difference in temperature between Cardiff and Plymouth.

.....  $^{\circ}\text{C}$

(1)

- (c) Work out the temperature which is halfway between  $-1^{\circ}\text{C}$  and  $5^{\circ}\text{C}$ .

.....  $^{\circ}\text{C}$

(1)  
(Total 3 marks)

**Q28.** (a) Write the number **nine thousand, three hundred and seventy four** in figures.

.....

(1)

(b) Write the number 62 500 in words.

.....

(1)

(c) Write down the value of the **8** in the number 3285

.....

(1)

(d) Write the number 2174 to the nearest hundred.

.....

(1)

(e) Write the number 7362 to the nearest thousand.

.....

(1)

(Total 5 marks)

**Q29.** (a) Work out  $2 \times (11 + 9)$

.....

(1)

(b) Work out  $3 \times 5 + 4$

.....

(1)

(c) Work out  $20 - 5 \times 3$

.....

(1)

(Total 3 marks)

**Q30.** (a) Write these numbers in order of size.  
Start with the smallest number.

17    6    168    24

.....

(1)

(b) Write these numbers in order of size.  
Start with the smallest number.

1.8    3.71    0.5    12.4

.....

(1)

(Total 2 marks)

**Q31.** The table shows the temperatures in three cities at noon one day.

Oslo	New York	Cape Town
$-13^{\circ}\text{C}$	$-5^{\circ}\text{C}$	$9^{\circ}\text{C}$

(a) Work out the difference in temperature between Oslo and New York.

.....  $^{\circ}\text{C}$

(1)

(b) Work out the difference in temperature between Cape Town and Oslo.

.....  $^{\circ}\text{C}$

(1)

(Total 2 marks)

**Q32.** The table gives information about the temperatures at midnight on New Year's Eve in 5 capital cities.

City	Temperature
London	$-3^{\circ}\text{C}$
Madrid	$7^{\circ}\text{C}$
Oslo	$-11^{\circ}\text{C}$
Washington DC	$1^{\circ}\text{C}$
Wellington	$14^{\circ}\text{C}$



In Oslo, the temperature dropped by 8 degrees from midday to midnight.

- (a) What was the temperature in Oslo at midday?

.....

(1)

At midnight on New Year's Eve in Paris, the temperature was halfway between the temperature in London and the temperature in Madrid.

- (b) What was the temperature in Paris?

You must show your working.

.....

(2)

(Total 3 marks)

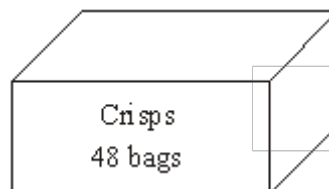
##

Jan bought 3 boxes of Salt 'n' Vinegar crisps and 2 boxes of Ready Salted crisps to sell at the Year 11 disco.

There are 48 bags of crisps in each box.

At the end of the disco there were 25 bags of crisps left.

How many bags of crisps were sold at the disco?



..... Bags

**(Total 3 marks)**

**Q34.** Jemilla goes swimming.

She swims 64 lengths of a swimming pool.

Each length is 25 m long.

(a) Work out how far Jemilla swims.

Give your answer in kilometres.

..... kilometres

**(3)**

The swimming pool is 25 m long by 10 m wide by 2.5 m deep.

(b) How many litres of water does it contain?

..... /

(3)  
(Total 6 marks)

**Q35.** Beth is planning a trip for a group of 36 people.  
The group can go to a theme park **or** to a concert.

If they go to the concert, they will go by train.  
If they go to the theme park, they will go by coach.

Beth has information about the costs.

<b><u>Theme Park Ticket Prices</u></b>
£9 per person
or £6.50 per person
in a group of 10 or more people

<b><u>Coach Hire</u></b>	
24 seats	£260
40 seats	£320
54 seats	£410

<b><u>Concert Ticket Price</u></b>
£7.50

<b><u>Return Train Fares</u></b>
£8.25 each
or
£26.50 for each group of 4 people

What is the least possible total cost of the trip?  
You must show all your working.

(Total 5 marks)

**Q36.** (a) Work out  $90 \div 10$

.....

(1)

(b) Write these numbers in order of size.  
Start with the smallest number.

2.8      4.71      0.6      13.4

.....

(1)

(c) Write  $\frac{7}{10}$  as a decimal.

.....

(1)  
(Total 3 marks)

**Q37.** Work out  $342 \times 24$ .

.....

(Total 3 marks)

**Q38.** (a) Write the number **three thousand one hundred and nine** in figures.

.....

(1)

- (b) Write down the value of the 6 in the number 23.469

.....

(1)

- (c) Write the number 4261 correct to the nearest hundred.

.....

(1)

(Total 3 marks)

- Q39.** At midnight the temperature was  $-9^{\circ}\text{C}$ .  
By 10 am, the temperature had risen by  $8^{\circ}\text{C}$ .

- (a) Work out the temperature at 10 am.

..... $^{\circ}\text{C}$

(1)

At midday the temperature was  $5^{\circ}\text{C}$ .

- (b) Work out the difference between the temperature at midnight and the temperature at midday.

..... $^{\circ}\text{C}$

(2)

On another day

the temperature at midnight was  $-7^{\circ}\text{C}$ ,  
the temperature at 10 am was  $-1^{\circ}\text{C}$  and  
the temperature at midday was  $3^{\circ}\text{C}$ .

Jenny says that, on this day, the temperature at 10 am is halfway between the temperatures at midnight and at midday.

- (c) Is Jenny correct?  
You must give a reason for your answer.

.....  
.....  
.....

(2)  
(Total 5 marks)

- Q40.** (a) Work out  $400 - 193$ .

.....

(2)

- (b) Work out  $4 - 9$ .

.....

(1)

- (c) Work out  $-3 \times 5$ .

.....

(1)

(d) Work out  $300 \div 50$ .

.....

(1)

(Total 5 marks)

**Q41.** The table shows temperatures at midnight and midday on one day in five cities.

City	Midnight temperature	Midday temperature
Belfast	-3 °C	4 °C
Cambridge	-1 °C	4 °C
Edinburgh	-7 °C	-1 °C
Leeds	-6 °C	3 °C
London	-2 °C	6 °C

(a) Which city had the lowest midnight temperature?

.....

(1)

(b) How many degrees higher was the midnight temperature in Cambridge than the



midnight temperature in Leeds?

..... °C

(1)

(c) Which city had the greatest rise in temperature from midnight to midday?

.....

(1)

(Total 3 marks)

**Q42.** There were 34 coins in a bag.  
Jim took 15 coins out of the bag.  
Rose put 17 coins into the bag.

How many coins are now in the bag?

.....

(Total 2 marks)

**Q43.** Here is a list of numbers.

3    8    11    25    33    41

Write down a number from the list which is

(a) an even number,

.....

(1)

(b) a square number,

- ..... (1)
- (c) a multiple of 11

..... (1)  
(Total 3 marks)

- Q44.** (a) Write the number **three thousand four hundred and twenty five** in figures.

..... (1)

- (b) Write down the value of 4 in the number 2840.

..... (1)

- (c) Write the number 279 to the nearest hundred.

..... (1)  
(Total 3 marks)

- Q45.** (a) Write these numbers in order of size.  
Start with the smallest number.

-5   3   -1   0   8

..... (1)

(b) Work out  $7 + 3 \times 5$

(1)  
(Total 2 marks)

**Q46.** Frankie says that  $15 - 3 \times 2 = 24$ .

Frankie is wrong.  
Explain why.

.....  
(Total 1 mark)

**Q47.** Frankie says that  $15 - 3 \times 2 = 24$ .

Frankie is wrong.  
Explain why.

.....  
(Total 1 mark)

- Q48.** (a) Write these numbers in order of size.  
Start with the smallest number.

-5    3    -1    0    8

.....

(1)

- (b) Work out  $7 + 3 \times 5$

(1)

(Total 2 marks)

- Q49.** (a) Write the number **three thousand four hundred and twenty five** in figures.

.....

(1)

- (b) Write down the value of 4 in the number 2840.

.....

(1)

- (c) Write the number 279 to the nearest hundred.

.....

(1)

(Total 3 marks)

**Q50.** Here is a list of numbers.

3    8    11    25    33    41

Write down a number from the list which is

(a) an even number,

.....

(1)

(b) a square number,

.....

(1)

(c) a multiple of 11

.....

(1)

**(Total 3 marks)**

**Q51.** There were 34 coins in a bag.  
Jim took 15 coins out of the bag.  
Rose put 17 coins into the bag.

How many coins are now in the bag?

.....

**(Total 2 marks)**

**Q52.** The table shows temperatures at midnight and midday on one day in five cities.

City	Midnight temperature	Midday temperature
Belfast	-3 °C	4 °C
Cambridge	-1 °C	4 °C
Edinburgh	-7 °C	-1 °C
Leeds	-6 °C	3 °C
London	-2 °C	6 °C

(a) Which city had the lowest midnight temperature?

.....

(1)

(b) How many degrees higher was the midnight temperature in Cambridge than the midnight temperature in Leeds?

..... °C

(1)

(c) Which city had the greatest rise in temperature from midnight to midday?

.....

(1)

(Total 3 marks)

**Q53.** (a) Work out  $400 - 193$ .

.....

(2)

(b) Work out  $4 - 9$ .

.....

(1)

(c) Work out  $-3 \times 5$ .

.....

(1)

(d) Work out  $300 \div 50$ .

.....

(1)

**(Total 5 marks)**

**Q54.** At midnight the temperature was  $-9^{\circ}\text{C}$ .  
By 10 am, the temperature had risen by  $8^{\circ}\text{C}$ .

(a) Work out the temperature at 10 am.

.....°C (1)

At midday the temperature was 5°C.

- (b) Work out the difference between the temperature at midnight and the temperature at midday.

.....°C (2)

On another day

the temperature at midnight was -7°C, the temperature at 10 am was -1°C and the temperature at midday was 3°C.

Jenny says that, on this day, the temperature at 10 am is halfway between the temperatures at midnight and at midday.

- (c) Is Jenny correct? You must give a reason for your answer.

.....  
.....  
.....

(2) (Total 5 marks)

- Q55. (a) Write the number **three thousand one hundred and nine** in figures.

..... (1)



(b) Write down the value of the 6 in the number 23.469

.....

(1)

(c) Write the number 4261 correct to the nearest hundred.

.....

(1)

(Total 3 marks)

**Q56.** Work out  $342 \times 24$ .

.....  
(Total 3 marks)

**Q57.** (a) Work out  $90 \div 10$

.....  
(1)

(b) Write these numbers in order of size.  
Start with the smallest number.

2.8      4.71      0.6      13.4

.....  
(1)

(c) Write  $1\frac{7}{10}$  as a decimal.

.....  
(1)  
(Total 3 marks)

- Q58.** Beth is planning a trip for a group of 36 people.  
The group can go to a theme park **or** to a concert.

If they go to the concert, they will go by train.

If they go to the theme park, they will go by coach.

Beth has information about the costs.

<p><b><u>Theme Park Ticket Prices</u></b> £9 per person or £6.50 per person in a group of 10 or more people</p>	<p><b><u>Coach Hire</u></b> 24 seats    £260 40 seats    £320 54 seats    £410</p>
<p><b><u>Concert Ticket Price</u></b> £7.50</p>	<p><b><u>Return Train Fares</u></b> £8.25 each or £26.50 for each group of 4 people</p>

What is the least possible total cost of the trip?  
You must show all your working.

(Total 5 marks)

**Q59.** Jemilla goes swimming.

She swims 64 lengths of a swimming pool.

Each length is 25 m long.

(a) Work out how far Jemilla swims.

Give your answer in kilometres.

..... kilometres

**(3)**

The swimming pool is 25 m long by 10 m wide by 2.5 m deep.

(b) How many litres of water does it contain?

..... l

**(3)**  
**(Total 6 marks)**

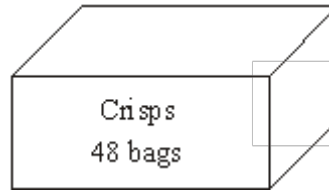
##

Jan bought 3 boxes of Salt 'n' Vinegar crisps and 2 boxes of Ready Salted crisps to sell at the Year 11 disco.

There are 48 bags of crisps in each box.

At the end of the disco there were 25 bags of crisps left.

How many bags of crisps were sold at the disco?



..... Bags

**(Total 3 marks)**

**Q61.** The table gives information about the temperatures at midnight on New Year's Eve in 5 capital cities.

City	Temperature
London	-3°C
Madrid	7°C
Oslo	-11°C
Washington DC	1°C
Wellington	14°C

In Oslo, the temperature dropped by 8 degrees from midday to midnight.

- (a) What was the temperature in Oslo at midday?

.....

(1)

At midnight on New Year's Eve in Paris, the temperature was halfway between the temperature in London and the temperature in Madrid.

- (b) What was the temperature in Paris?

You must show your working.

.....

(2)  
(Total 3 marks)

**Q62.** The table shows the temperatures in three cities at noon one day.

Oslo	New York	Cape Town
-13°C	-5°C	9°C

- (a) Work out the difference in temperature between Oslo and New York.

..... °C

(1)

- (b) Work out the difference in temperature between Cape Town and Oslo.

..... °C

(1)

(Total 2 marks)

- Q63.** (a) Write these numbers in order of size.  
Start with the smallest number.

17    6    168    24

.....

(1)

- (b) Write these numbers in order of size.  
Start with the smallest number.

1.8    3.71    0.5    12.4

.....

(1)

(Total 2 marks)

- Q64.** (a) Work out  $2 \times (11 + 9)$

.....

(1)

(b) Work out  $3 \times 5 + 4$

.....

(1)

(c) Work out  $20 - 5 \times 3$

.....

(1)

(Total 3 marks)

**Q65.** (a) Write the number **nine thousand, three hundred and seventy four** in figures.

.....

(1)

(b) Write the number 62 500 in words.

.....

(1)

(c) Write down the value of the **8** in the number 3285

.....

(1)

(d) Write the number 2174 to the nearest hundred.

.....

(1)

(e) Write the number 7362 to the nearest thousand.



.....  
(1)  
(Total 5 marks)

Q66.

City	Temperature
Cardiff	$-2\text{ }^{\circ}\text{C}$
Edinburgh	$-4\text{ }^{\circ}\text{C}$
Leeds	$2\text{ }^{\circ}\text{C}$
London	$-1\text{ }^{\circ}\text{C}$
Plymouth	$5\text{ }^{\circ}\text{C}$

The table gives information about the temperatures at midnight in 5 cities.

(a) Write down the lowest temperature.

.....  $^{\circ}\text{C}$

(1)

(b) Work out the difference in temperature between Cardiff and Plymouth.

.....  $^{\circ}\text{C}$

(1)

(c) Work out the temperature which is halfway between  $-1\text{ }^{\circ}\text{C}$  and  $5\text{ }^{\circ}\text{C}$ .

.....  $^{\circ}\text{C}$

(1)  
(Total 3 marks)

**Q67.** (a) Write the number 4117 in words.

.....

(1)

(b) Write the number 4117 to the nearest hundred.

.....

(1)  
(Total 2 marks)

**Q68.**

A bus seats 47 people.  
Another 6 people can stand.

There are 44 people on the bus.  
The bus stops.

8 people get off the bus.  
19 people want to get on the bus.

Can the bus hold all the people who want to get on the bus?

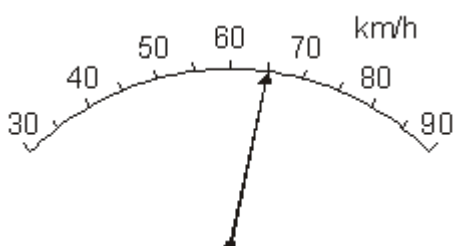


Explain your answer.



(Total 2 marks)

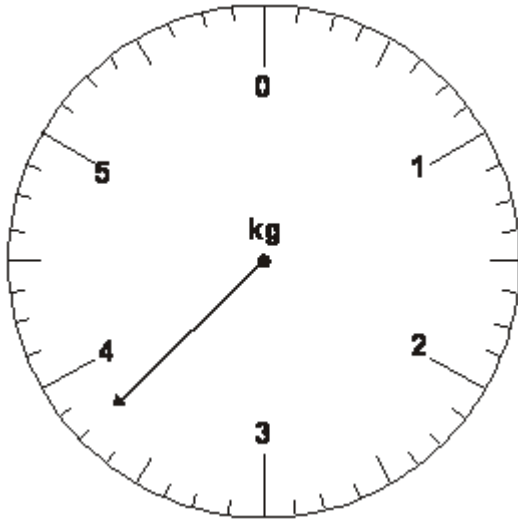
**Q69.** (a) Write down the reading on this scale.



..... km/h

(1)

The scale shows the weight of Sam's dog.



Sam's baby brother weighs 5 kg.

(b) Work out the difference in weight between Sam's baby brother and Sam's dog.

..... kg

(2)  
(Total 3 marks)

M1.

Answer	Mark	Additional Guidance
explanation	1	<b>B1</b> for explanation with Bidmas e.g. Brackets needed (15 – 3) or Answer should be 9 Note: brackets needed is insufficient
<b>Total for Question: 1 mark</b>		

M2.

	Working	Answer	Mark	Additional Guidance
(a)		-5, -1, 0, 3, 8	1	<b>B1</b> for -5, -1, 0, 3, 8 cao
(b)	7 + 15	22	1	<b>B1</b> for 22 cao
<b>Total for Question: 2 marks</b>				

M3.

	Answer	Mark	Additional Guidance
(a)	3425	1	<b>B1</b> for 3425 cao
(b)	40	1	<b>B1</b> for 40 or forty or 4 tens or tens

(c)	300	1	<b>B1</b> for 300 or 3 (hundred)
<b>Total for Question: 3 marks</b>			

**M4.**

	Answer	Mark	Additional Guidance
(a)	8	1	<b>B1</b> for 8 cao
(b)	25	1	<b>B1</b> for 25 cao
(c)	33	1	<b>B1</b> for 33 (or 11)
<b>Total for Question: 3 marks</b>			

**M5.**

Working	Answer	Mark	Additional Guidance
$34 - 15 + 17$	36	2	<b>M1</b> $34 - 15 + 17$ or $34 + 2$ or $34 + 17 - 15$ oe or sight of 19 or 51 <b>A1</b> cao (accept if 36p seen) <b>B1</b> SC for 2 seen as their answer
<b>Total for Question: 2 marks</b>			

**M6.**

	Answer	Mark	Additional Guidance
(a)	Edinburgh	1	<b>B1</b> for Edinburgh or $-7$
(b)	5	1	<b>B1</b> cao
(c)	Leeds	1	<b>B1</b> for Leeds or $-6$ to $3$ or $9$ or $-9$
<b>Total for Question: 3 marks</b>			

**M7.**

	Answer	Mark	Additional Guidance
(a)	207	2	<b>M1</b> for a valid method (condone one error) or sight of 7 (as units) in working or answer <b>OR</b> '193 + 7' + 200 or '193 + 200' + 7 <b>A1</b> cao
(b)	$-5$	1	<b>B1</b> cao
(c)	$-15$	1	<b>B1</b> cao
(d)	6	1	<b>B1</b> cao
<b>Total for Question: 5 marks</b>			

**M8.**

	Answer	Mark	Additional Guidance
(a)	-1	1	<b>B1</b> cao
(b)	14	2	<b>M1</b> for $5 - -9$ or $-9 - 5$ <b>A1</b> for 14 or -14
(c)	No + reason	2	<b>M1</b> for attempt to find middle of -7 and 3 eg, may see -7 and 3 on number line <b>or</b> $(-7 - 3) \div 2$ <b>or</b> $(-3 - 7) \div 2$ <b>A1</b> for 'No' and correct reason
<b>Total for Question: 5 marks</b>			

**M9.**

	Answer	Mark	Additional Guidance
(a)	3109	1	<b>B1</b> cao
(b)	6 hundredths	1	<b>B1</b> for 6 hundredths or 0.06 or $\frac{6}{100}$
(c)	4300	1	<b>B1</b> cao
<b>Total for Question: 3 marks</b>			

**M10.**

Working	Answer	Mark	Additional Guidance
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$\begin{array}{r} 342 \\ \times 24 \\ \hline 6840 \\ 1368 \\ \hline 8208 \end{array}$ $\begin{array}{r} 24 \\ \times 342 \\ \hline 7200 \\ 960 \\ 48 \\ \hline 8208 \end{array}$ <table border="1" style="margin-top: 10px;"> <tr> <td>300</td> <td>40</td> <td>2</td> <td></td> </tr> <tr> <td>6000</td> <td>800</td> <td>40</td> <td>20</td> </tr> <tr> <td>1200</td> <td>160</td> <td>8</td> <td>4</td> </tr> </table> <p>6000 + 800 + 40 + 1200 + 160 + 8 = 8208</p>	300	40	2		6000	800	40	20	1200	160	8	4	<p>8208</p>	<p>3</p> <p><b>M1</b> for a complete method with relative place value correct. Condone 1 multiplication error, addition not necessary.  <b>M1</b> (dep) for addition of all the appropriate elements of the calculation.  <b>A1</b> cao</p> <p><b>M1</b> for a complete grid with not more than 1 multiplication error, addition not necessary (inside numbers)  <b>M1</b> (dep) for addition of all the appropriate elements of the calculation (eg outside numbers)  <b>A1</b> cao</p> <p><b>M1</b> for sight of a complete partitioning method, condone 1 multiplication error, addition not necessary.  <b>M1</b> (dep) for addition of all the appropriate elements of the calculation.  <b>A1</b> cao</p>
300	40	2												
6000	800	40	20											
1200	160	8	4											
<p><b>Total for Question: 3 marks</b></p>														

**M11.**

	Answer	Mark	Additional Guidance
(a)	9	1	<b>B1</b> cao
(b)	0.6, 2.8, 4.71, 13.4	1	<b>B1</b> cao
(c)	0.7	1	<b>B1</b> cao
<p><b>Total for Question: 3 marks</b></p>			

M12.

Working	Answer	Mark	Additional Guidance
$6.50 \times 36 = 234$ $234 + 320 = 554$  $36 \div 4 = 9$ $26.50 \times 9 = 238.50$ $36 \times 7.50 = 270$ $270 + 238.5 = 508.5$  OR  $320 \div 36 = 8.88(9)$ $8.88(9) + 6.50 = 15.38(9)$  $26.50 \div 4 = 6.62(3)$ $6.62(3) + 7.50 = 14.12(3)$ $14.12(3) \times 36 = 508.50$	£508.50	5	<b>M1</b> for using $36 \times$ correct entrance price, $36 \times 7.50$ or $36 \times 6.50$ <b>M1</b> for using correct travel cost, 320 or " $36 \div 4$ " $\times$ 26.50 (238.50) [condone 320 for concert and " $36 \div 4$ " $\times$ 26.50 (238.50) for theme park] <b>A1</b> for 554 cao <b>A1</b> for 508.5 cao <b>C1</b> ft for identifying, in words, the cheaper venue from 2 calculated amounts. One amount must be for the theme park and one amount must be for the concert [Note: the 2 calculated amounts must each be of ticket plus travel costs] OR <b>M1</b> for $320 \div 36 [= 8.88(9)]$ or $26.50 \div 4 = [6.62(3)]$ <b>A1</b> for 15.38(9) or 14.12(3) <b>M1</b> for " $14.12(3)$ " $\times$ 36 <b>A1</b> for 508.5 <b>C1</b> ft for identifying, in words, "the cheaper cost per student gives the least total cost".
			<b>Total for Question: 5 marks</b>

M13.

	Working	Answer	Mark	Additional Guidance
(a)	$64 \times 75\text{m} = 4800\text{m}$  $4800 \div 1000$	4.8 km	3	<b>M1</b> for $64 \times 75$  <b>M1</b> for " $64 \times 75$ " $\div$ 1000

				A1 cao
(b)	Vol = $25 \times 10 \times 2.5 = 625\text{m}^3$ $625 \times 1000$	625 000	3	M1 for attempt at finding the volume M1 for attempt to find the number of l in $1\text{m}^3$ or $1\text{m}^3 = 1000\text{l}$ A1 cao
<b>Total for Question: 6 marks</b>				

**M14.**

Working	Answer	Mark	Additional Guidance
$(3 + 2) \times 48 = 240$ $240 - 35$	215	3	M1 for attempt to find total number of bags of crisps M1 for attempt to subtract 25 A1 cao 3
<b>Total for Question: 3 marks</b>			

**M15.**

	Working	Answer	Mark	Additional Guidance
(a)	$-11 + 8$ OR use a number line and count back Eg: $-11 \quad -10 \quad -9 \quad -8 \quad -7 \quad -6 \quad -4$ $-3 \quad -2 \quad -1 \quad 0 \quad 1$ Count 8 places	$-3^\circ\text{C}$	1	B1 cao

(b)

2°C

2

<b>Total for Question: 3 marks</b>
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**M16.**

	Answer	Mark	Additional Guidance
(a)	8	1	<b>B1</b> cao Accept negative answers.
(b)	22	1	<b>B1</b> cao Accept negative answers.
<b>Total for Question: 2 marks</b>			

**M17.**

	Answer	Mark	Additional Guidance
(a)	6, 17, 24, 168	1	<b>B1</b> for 6, 17, 24, 168
(b)	0.5, 1.8, 3.71, 12.4	1	<b>B1</b> for 0.5, 1.8, 3.71, 12.4
<b>Total for Question: 2 marks</b>			

**M18.**

	Answer	Mark	Additional Guidance
(a)	40	1	<b>B1</b> cao
(b)	19	1	<b>B1</b> cao
(c)	5	1	<b>B1</b> cao
<b>Total for Question: 3 marks</b>			

**M19.**

	Answer	Mark	Additional Guidance
(a)	9374	1	<b>B1</b> cao
(b)	sixty two thousand five hundred	1	<b>B1</b> cao
(c)	80	1	<b>B1</b> for 80, accept 8 tens, tens
(d)	2200	1	<b>B1</b> cao
(e)	7000	1	<b>B1</b> cao
<b>Total for Question: 5 marks</b>			

**M20.**

	Answer	Mark	Additional Guidance
(a)	-4	1	<b>B1</b> for $-4^{\circ}\text{C}$ or Edinburgh

(b)	7	1	<b>B1</b> for 7 (accept -7)
(c)	2	1	<b>B1</b> for 2 or Leeds
<b>Total for Question: 3 marks</b>			

**M21.**

	Answer	Mark	Additional Guidance
(a)	Four thousand, one hundred and seventeen	1	<b>B1</b> for four thousand, one hundred and seventeen or
(b)	4100	1	<b>B1</b> for 4100 in figures or words or 41 hundred
<b>Total for Question: 2 marks</b>			

**M22.**

Working	Answer	Mark	Additional Guidance
$44 - 8 = 36$ $36 + 19 = 55$ $47 + 3 = 53$ <b>OR</b> $44 + 19 - 8 = 55$ $47 + 6 = 53$ <b>OR</b> $47 - 44 = 3$	2 (with appropriate reason)	2	<b>M1</b> Clear attempt to find the number of spaces available on the bus after the bus stops  <b>A1</b> reason for answer which must comment on the difference between 55 and 53

3 + 8 = 11			
19 - 11 - 6 = 2			
<b>Total for Question: 2 marks</b>			

M23.

	Working	Answer	Mark	Additional Guidance
(a)		65	1	<b>B1</b> cao
(b)	5 - 3.8	1.2	2	<b>M1</b> 5 - 3.8 <b>A1</b> cao
<b>Total for Question: 3 marks</b>				

M24.

	Working	Answer	Mark	Additional Guidance
(a)		65	1	<b>B1</b> cao
(b)	5 - 3.8	1.2	2	<b>M1</b> 5 - 3.8 <b>A1</b> cao
<b>Total for Question: 3 marks</b>				



M25.

Working	Answer	Mark	Additional Guidance
$44 - 8 = 36$ $36 + 19 = 55$ $47 + 3 = 53$  <b>OR</b>  $44 + 19 - 8 = 55$ $47 + 6 = 53$  <b>OR</b>  $47 - 44 = 3$ $3 + 8 = 11$ $19 - 11 - 6 = 2$	2 (with appropriate reason)	2	<b>M1</b> Clear attempt to find the number of spaces available on the bus after the bus stops  <b>A1</b> reason for answer which must comment on the difference between 55 and 53
			<b>Total for Question: 2 marks</b>

M26.

	Answer	Mark	Additional Guidance
(a)	Four thousand, one hundred and seventeen	1	<b>B1</b> for four thousand, one hundred and seventeen or
(b)	4100	1	<b>B1</b> for 4100 in figures or words or 41 hundred
			<b>Total for Question: 2 marks</b>

M27.

	Answer	Mark	Additional Guidance
(a)	-4	1	<b>B1</b> for $-4^{\circ}\text{C}$ or Edinburgh
(b)	7	1	<b>B1</b> for 7 (accept -7)
(c)	2	1	<b>B1</b> for 2 or Leeds
			<b>Total for Question: 3 marks</b>

M28.

	Answer	Mark	Additional Guidance
(a)	9374	1	<b>B1</b> cao
(b)	sixty two thousand five hundred	1	<b>B1</b> cao
(c)	80	1	<b>B1</b> for 80, accept 8 tens, tens
(d)	2200	1	<b>B1</b> cao
(e)	7000	1	<b>B1</b> cao
			<b>Total for Question: 5 marks</b>

M29.

	Answer	Mark	Additional Guidance
(a)	40	1	<b>B1</b> cao
(b)	19	1	<b>B1</b> cao
(c)	5	1	<b>B1</b> cao
<b>Total for Question: 3 marks</b>			

**M30.**

	Answer	Mark	Additional Guidance
(a)	6, 17, 24, 168	1	<b>B1</b> for 6, 17, 24, 168
(b)	0.5, 1.8, 3.71, 12.4	1	<b>B1</b> for 0.5, 1.8, 3.71, 12.4
<b>Total for Question: 2 marks</b>			

**M31.**

	Answer	Mark	Additional Guidance
(a)	8	1	<b>B1</b> cao Accept negative answers.
(b)	22	1	<b>B1</b> cao Accept negative answers.
<b>Total for Question: 2 marks</b>			

M32.

	Working	Answer	Mark	Additional Guidance
(a)	$-11 + 8$ OR use a number line and count back Eg: -11 -10 -9 -8 -7 -6 -4 -3 -2 -1 0 1 Count 8 places	$-3^{\circ}\text{C}$	1	<b>B1</b> cao

(b)

2°C

2

<b>Total for Question: 3 marks</b>
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**M33.**

Working	Answer	Mark	Additional Guidance
(3 + 2) × 48 = 240 240 – 35	215	3	<b>M1</b> for attempt to find total number of bags of crisps <b>M1</b> for attempt to subtract 25 <b>A1</b> cao 3
<b>Total for Question: 3 marks</b>			

**M34.**

	Working	Answer	Mark	Additional Guidance
(a)	64 × 75m = 4800m 4800 ÷ 1000	4.8 km	3	<b>M1</b> for 64 × 75 <b>M1</b> for “64 × 75” ÷ 1000 <b>A1</b> cao
(b)	Vol = 25 × 10 × 2.5 = 625m <sup>3</sup> 625 × 1000	625 000	3	<b>M1</b> for attempt at finding the volume <b>M1</b> for attempt to find the number of l in 1m <sup>3</sup> or 1m <sup>3</sup> = 1000l <b>A1</b> cao
<b>Total for Question: 6 marks</b>				

M35.

Working	Answer	Mark	Additional Guidance
$6.50 \times 36 = 234$ $234 + 320 = 554$  $36 \div 4 = 9$ $26.50 \times 9 = 238.50$ $36 \times 7.50 = 270$ $270 + 238.5 = 508.5$  OR  $320 \div 36 = 8.88(9)$ $8.88(9) + 6.50 =$ $15.38(9)$  $26.50 \div 4 = 6.62(3)$ $6.62(3) + 7.50 =$ $14.12(3)$ $14.12(3) \times 36 = 508.50$	£508.50	5	<b>M1</b> for using $36 \times$ correct entrance price, $36 \times 7.50$ or $36 \times 6.50$ <b>M1</b> for using correct travel cost, 320 or " $36 \div 4$ " $\times$ 26.50 (238.50) [condone 320 for concert and " $36 \div 4$ " $\times$ 26.50 (238.50) for theme park] <b>A1</b> for 554 cao <b>A1</b> for 508.5 cao C1 ft for identifying, in words, the cheaper venue from 2 calculated amounts. One amount must be for the theme park and one amount must be for the concert [Note: the 2 calculated amounts must each be of ticket plus travel costs] OR <b>M1</b> for $320 \div 36 [= 8.88(9)]$ or $26.50 \div 4 = [6.62(3)]$ <b>A1</b> for 15.38(9) or 14.12(3) <b>M1</b> for " $14.12(3)$ " $\times$ 36 <b>A1</b> for 508.5 C1 ft for identifying, in words, "the cheaper cost per student gives the least total cost".
			<b>Total for Question: 5 marks</b>

M36.

	Answer	Mark	Additional Guidance
(a)	9	1	<b>B1</b> cao

(b)	0.6, 2.8, 4.71, 13.4	1	<b>B1</b> cao
(c)	0.7	1	<b>B1</b> cao
<b>Total for Question: 3 marks</b>			

**M37.**

Working	Answer	Mark	Additional Guidance												
$  \begin{array}{r}  342 \\  \times 24 \\  \hline  6840 \\  1368 \\  \hline  8208  \end{array}  $  <table border="1" style="display: inline-table; vertical-align: top;"> <tr> <td>300</td> <td>40</td> <td>2</td> <td></td> </tr> <tr> <td>6000</td> <td>800</td> <td>40</td> <td>20</td> </tr> <tr> <td>1200</td> <td>160</td> <td>8</td> <td>4</td> </tr> </table> $6000 + 800 + 40 + 1200 + 160 + 8 = 8208$	300	40	2		6000	800	40	20	1200	160	8	4	8208	3	<p><b>M1</b> for a complete method with relative place value correct. Condone 1 multiplication error, addition not necessary.</p> <p><b>M1</b> (dep) for addition of all the appropriate elements of the calculation.</p> <p><b>A1</b> cao</p> <p><b>M1</b> for a complete grid with not more than 1 multiplication error, addition not necessary (inside numbers)</p> <p><b>M1</b> (dep) for addition of all the appropriate elements of the calculation (eg outside numbers)</p> <p><b>A1</b> cao</p> <p><b>M1</b> for sight of a complete partitioning method, condone 1 multiplication error, addition not necessary.</p> <p><b>M1</b> (dep) for addition of all the appropriate elements of the calculation.</p> <p><b>A1</b> cao</p>
300	40	2													
6000	800	40	20												
1200	160	8	4												
<b>Total for Question: 3 marks</b>															



M38.

	Answer	Mark	Additional Guidance
(a)	3109	1	<b>B1</b> cao
(b)	6 hundredths	1	<b>B1</b> for 6 hundredths or 0.06 or $\frac{6}{100}$
(c)	4300	1	<b>B1</b> cao
<b>Total for Question: 3 marks</b>			

M39.

	Answer	Mark	Additional Guidance
(a)	-1	1	<b>B1</b> cao
(b)	14	2	<b>M1</b> for $5 - -9$ or $-9 - 5$ <b>A1</b> for 14 or -14
(c)	No + reason	2	<b>M1</b> for attempt to find middle of -7 and 3 eg, may see -7 and 3 on number line <b>or</b> $(-7 - 3) \div 2$ <b>or</b> $(-3 - 7) \div 2$ <b>A1</b> for 'No' and correct reason
<b>Total for Question: 5 marks</b>			

M40.

	Answer	Mark	Additional Guidance
(a)	207	2	<b>M1</b> for a valid method (condone one error) or sight of 7 (as units) in working or answer <b>OR</b> '193 + 7' + 200 or '193 + 200' + 7 <b>A1</b> cao
(b)	-5	1	<b>B1</b> cao
(c)	-15	1	<b>B1</b> cao
(d)	6	1	<b>B1</b> cao
<b>Total for Question: 5 marks</b>			

**M41.**

	Answer	Mark	Additional Guidance
(a)	Edinburgh	1	<b>B1</b> for Edinburgh or -7
(b)	5	1	<b>B1</b> cao
(c)	Leeds	1	<b>B1</b> for Leeds or -6 to 3 or 9 or -9
<b>Total for Question: 3 marks</b>			

**M42.**

Working	Answer	Mark	Additional Guidance
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$34 - 15 + 17$	36	2	<b>M1</b> $34 - 15 + 17$ or $34 + 2$ or $34 + 17 - 15$ oe or sight of 19 or 51 <b>A1</b> cao (accept if 36p seen) <b>B1</b> SC for 2 seen as their answer
			<b>Total for Question: 2 marks</b>

M43.

	Answer	Mark	Additional Guidance
(a)	8	1	<b>B1</b> for 8 cao
(b)	25	1	<b>B1</b> for 25 cao
(c)	33	1	<b>B1</b> for 33 (or 11)
			<b>Total for Question: 3 marks</b>

M44.

	Answer	Mark	Additional Guidance
(a)	3425	1	<b>B1</b> for 3425 cao
(b)	40	1	<b>B1</b> for 40 or forty or 4 tens or tens
(c)	300	1	<b>B1</b> for 300 or 3 (hundred)
			<b>Total for Question: 3 marks</b>

M45.

	Working	Answer	Mark	Additional Guidance
(a)		-5, -1, 0, 3, 8	1	<b>B1</b> for -5, -1, 0, 3, 8 cao
(b)	$7 + 15$	22	1	<b>B1</b> for 22 cao
<b>Total for Question: 2 marks</b>				

M46.

Answer	Mark	Additional Guidance
explanation	1	<b>B1</b> for explanation with Bidmas e.g. Brackets needed ( $15 - 3$ ) or Answer should be 9 Note: brackets needed is insufficient
<b>Total for Question: 1 mark</b>		

M47.

Answer	Mark	Additional Guidance
explanation	1	<b>B1</b> for explanation with Bidmas

	e.g. Brackets needed (15 – 3) or Answer should be 9 Note: brackets needed is insufficient
<b>Total for Question: 1 mark</b>	

**M48.**

	Working	Answer	Mark	Additional Guidance
(a)		-5, -1, 0, 3, 8	1	<b>B1</b> for -5, -1, 0, 3, 8 cao
(b)	7 + 15	22	1	<b>B1</b> for 22 cao
<b>Total for Question: 2 marks</b>				

**M49.**

	Answer	Mark	Additional Guidance
(a)	3425	1	<b>B1</b> for 3425 cao
(b)	40	1	<b>B1</b> for 40 or forty or 4 tens or tens
(c)	300	1	<b>B1</b> for 300 or 3 (hundred)
<b>Total for Question: 3 marks</b>			

**M50.**

	Answer	Mark	Additional Guidance
(a)	8	1	<b>B1</b> for 8 cao
(b)	25	1	<b>B1</b> for 25 cao
(c)	33	1	<b>B1</b> for 33 (or 11)
<b>Total for Question: 3 marks</b>			

**M51.**

Working	Answer	Mark	Additional Guidance
$34 - 15 + 17$	36	2	<b>M1</b> $34 - 15 + 17$ or $34 + 2$ or $34 + 17 - 15$ oe or sight of 19 or 51 <b>A1</b> cao (accept if 36p seen) <b>B1</b> SC for 2 seen as their answer
<b>Total for Question: 2 marks</b>			

**M52.**

	Answer	Mark	Additional Guidance
(a)	Edinburgh	1	<b>B1</b> for Edinburgh or $-7$

(b)	5	1	<b>B1</b> cao
(c)	Leeds	1	<b>B1</b> for Leeds or $-6$ to $3$ or $9$ or $-9$
<b>Total for Question: 3 marks</b>			

**M53.**

	Answer	Mark	Additional Guidance
(a)	207	2	<b>M1</b> for a valid method (condone one error) or sight of 7 (as units) in working or answer <b>OR</b> '193 + 7' + 200 or '193 + 200' + 7 <b>A1</b> cao
(b)	$-5$	1	<b>B1</b> cao
(c)	$-15$	1	<b>B1</b> cao
(d)	6	1	<b>B1</b> cao
<b>Total for Question: 5 marks</b>			

**M54.**

	Answer	Mark	Additional Guidance
(a)	$-1$	1	<b>B1</b> cao
(b)	14	2	<b>M1</b> for $5 - -9$ or $-9 - 5$ <b>A1</b> for 14 or $-14$
(c)	No + reason	2	<b>M1</b> for attempt to find middle of $-7$ and $3$ eg, may

		see -7 and 3 on number line <b>or</b> $(-7 - 3) \div 2$ <b>or</b> $(-3 - 7) \div 2$ <b>A1</b> for 'No' and correct reason
<b>Total for Question: 5 marks</b>		

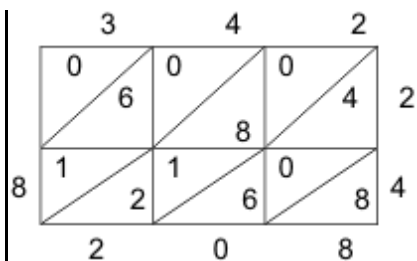
**M55.**

	Answer	Mark	Additional Guidance
(a)	3109	1	<b>B1</b> cao
(b)	6 hundredths	1	<b>B1</b> for 6 hundredths or 0.06 or $\frac{6}{100}$
(c)	4300	1	<b>B1</b> cao
<b>Total for Question: 3 marks</b>			

**M56.**

Working	Answer	Mark	Additional Guidance
$  \begin{array}{r}  342 \\  \times 24 \\  \hline  6840 \\  1368 \\  \hline  8208  \end{array}  $	8208	3	<b>M1</b> for a complete method with relative place value correct. Condone 1 multiplication error, addition not necessary. <b>M1</b> (dep) for addition of all the appropriate elements of the calculation. <b>A1</b> cao  <b>M1</b> for a complete grid with not more than 1 multiplication error, addition not necessary (inside numbers) <b>M1</b> (dep) for addition of all the appropriate





300	40	2	
6000	800	40	20
1200	160	8	4

$$6000 + 800 + 40 + 1200 + 160 + 8 = 8208$$

elements of the calculation (eg outside numbers)

**A1** cao

**M1** for sight of a complete partitioning method, condone 1 multiplication error, addition not necessary.

**M1** (dep) for addition of all the appropriate elements of the calculation.

**A1** cao

**Total for Question: 3 marks**

**M57.**

	Answer	Mark	Additional Guidance
(a)	9	1	<b>B1</b> cao
(b)	0.6, 2.8, 4.71, 13.4	1	<b>B1</b> cao
(c)	0.7	1	<b>B1</b> cao

**Total for Question: 3 marks**

**M58.**

Working	Answer	Mark	Additional Guidance
$6.50 \times 36 = 234$ $234 + 320 = 554$  $36 \div 4 = 9$ $26.50 \times 9 = 238.50$ $36 \times 7.50 = 270$ $270 + 238.5 = 508.5$  OR  $320 \div 36 = 8.88(9)$ $8.88(9) + 6.50 =$ $15.38(9)$  $26.50 \div 4 = 6.62(3)$ $6.62(3) + 7.50 =$ $14.12(3)$ $14.12(3) \times 36 = 508.50$	£508.50	5	<b>M1</b> for using $36 \times$ correct entrance price, $36 \times 7.50$ or $36 \times 6.50$ <b>M1</b> for using correct travel cost, 320 or " $36 \div 4$ " $\times$ 26.50 (238.50) [condone 320 for concert and " $36 \div 4$ " $\times$ 26.50 (238.50) for theme park] <b>A1</b> for 554 cao <b>A1</b> for 508.5 cao C1 ft for identifying, in words, the cheaper venue from 2 calculated amounts. One amount must be for the theme park and one amount must be for the concert [Note: the 2 calculated amounts must each be of ticket plus travel costs] OR <b>M1</b> for $320 \div 36 [= 8.88(9)]$ or $26.50 \div 4 = [6.62(3)]$ <b>A1</b> for 15.38(9) or 14.12(3) <b>M1</b> for " $14.12(3)$ " $\times$ 36 <b>A1</b> for 508.5 C1 ft for identifying, in words, "the cheaper cost per student gives the least total cost".
<b>Total for Question: 5 marks</b>			

**M59.**

	Working	Answer	Mark	Additional Guidance
(a)	$64 \times 75\text{m} = 4800\text{m}$  $4800 \div 1000$	4.8 km	3	<b>M1</b> for $64 \times 75$  <b>M1</b> for " $64 \times 75$ " $\div$ 1000  <b>A1</b> cao
(b)	$\text{Vol} = 25 \times 10 \times 2.5 = 625\text{m}^3$  $625 \times 1000$	625 000	3	<b>M1</b> for attempt at finding the volume  <b>M1</b> for attempt to find the number of $l$ in $1\text{m}^3$ or $1\text{m}^3 = 1000l$  <b>A1</b> cao

<b>Total for Question: 6 marks</b>
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**M60.**

Working	Answer	Mark	Additional Guidance
(3 + 2) × 48 = 240 240 – 35	215	3	<b>M1</b> for attempt to find total number of bags of crisps <b>M1</b> for attempt to subtract 25 <b>A1</b> cao 3
<b>Total for Question: 3 marks</b>			

**M61.**

	Working	Answer	Mark	Additional Guidance
(a)	-11 + 8 OR use a number line and count back Eg: -11 -10 -9 -8 -7 -6 -4 -3 -2 -1 0 1 Count 8 places	-3°C	1	<b>B1</b> cao

(b)

2°C

2

<b>Total for Question: 3 marks</b>
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**M62.**

	Answer	Mark	Additional Guidance
(a)	8	1	<b>B1</b> cao Accept negative answers.
(b)	22	1	<b>B1</b> cao Accept negative answers.
<b>Total for Question: 2 marks</b>			

**M63.**

	Answer	Mark	Additional Guidance
(a)	6, 17, 24, 168	1	<b>B1</b> for 6, 17, 24, 168
(b)	0.5, 1.8, 3.71, 12.4	1	<b>B1</b> for 0.5, 1.8, 3.71, 12.4
<b>Total for Question: 2 marks</b>			

**M64.**

	Answer	Mark	Additional Guidance
(a)	40	1	<b>B1</b> cao
(b)	19	1	<b>B1</b> cao
(c)	5	1	<b>B1</b> cao
<b>Total for Question: 3 marks</b>			

**M65.**

	Answer	Mark	Additional Guidance
(a)	9374	1	<b>B1</b> cao
(b)	sixty two thousand five hundred	1	<b>B1</b> cao
(c)	80	1	<b>B1</b> for 80, accept 8 tens, tens
(d)	2200	1	<b>B1</b> cao
(e)	7000	1	<b>B1</b> cao
<b>Total for Question: 5 marks</b>			

**M66.**

	Answer	Mark	Additional Guidance
(a)	-4	1	<b>B1</b> for $-4^{\circ}\text{C}$ or Edinburgh

(b)	7	1	<b>B1</b> for 7 (accept -7)
(c)	2	1	<b>B1</b> for 2 or Leeds
<b>Total for Question: 3 marks</b>			

**M67.**

	Answer	Mark	Additional Guidance
(a)	Four thousand, one hundred and seventeen	1	<b>B1</b> for four thousand, one hundred and seventeen or
(b)	4100	1	<b>B1</b> for 4100 in figures or words or 41 hundred
<b>Total for Question: 2 marks</b>			

**M68.**

Working	Answer	Mark	Additional Guidance
$44 - 8 = 36$ $36 + 19 = 55$ $47 + 3 = 53$ <b>OR</b> $44 + 19 - 8 = 55$ $47 + 6 = 53$ <b>OR</b> $47 - 44 = 3$	2 (with appropriate reason)	2	<b>M1</b> Clear attempt to find the number of spaces available on the bus after the bus stops  <b>A1</b> reason for answer which must comment on the difference between 55 and 53

3 + 8 = 11			
19 - 11 - 6 = 2			
<b>Total for Question: 2 marks</b>			

**M69.**

	Working	Answer	Mark	Additional Guidance
(a)		65	1	<b>B1</b> cao
(b)	5 - 3.8	1.2	2	<b>M1</b> 5 - 3.8 <b>A1</b> cao
<b>Total for Question: 3 marks</b>				



- E1.** This question was not very well understood as many candidates were happy that the incorrect answer was, in fact, correct. Only 56% of candidates were able to correctly give a correct reason as to how 24 was in fact obtained or how to correctly calculate  $15 - 3 \times 2$  as 9. Some candidates indicated that brackets were needed but gave no indication as to their placement to make a true statement.
- E2.** Part (a) was almost always correct but in part (b) the correct answer of 22 was rarely seen whilst the modal incorrect answer of 50 was seen frequently.
- E3.** This question was very well answered with almost all candidates gaining the full 3 marks.
- E4.** This question too was well understood with almost all candidates gaining full marks; however a small minority gave odd numbers instead of evens and 3 instead of a square number.
- E5.** This question was well understood with 88% of candidates scoring full marks. A further 8% of candidates scored 1 mark either for showing a complete method or for sight

of 19 or 51. Many candidates took away both 15 and 17 and got an answer of 2. They were awarded one mark for a misread of taking 15 and 17 away from 34.

**E6.** This question was done well by the vast majority of candidates.

Common errors in part (b) were  $-5$  and  $-7$ . Common errors in part (c) were Edinburgh and London.

**E7.** Many candidates were able to score at least one mark for part (a) of this question. This was usually for obtaining a 7 in the unit column of their answer. A significant number of candidates were unable to obtain the correct answer. Common incorrect answers here were 217, 117 and 393. In part (b), many candidates were able to take 9 from 4 to get  $-5$ . A very common incorrect answer here was 5. Part (c) was done well by most candidates. Common incorrect answers here were 15 and 2. Part (d) was done well by the majority of candidates. It was rare to see this calculation set out as a long division- many just simply wrote down the answer. Common incorrect answers here were 60 and 250.

##

It is always surprising how few candidates draw a number line to assist them in completing questions on temperature. Those who do are more successful at answering the questions. There were many correct answers in (a), but errors included those who did 8-9, those who miscounted (presumably in their head) and those who counted the wrong way. In part (b) some did the difference with the 10 am temperature, and as in the first part errors of miscounting and counting the wrong way. Most gave an explanation in part (c), and the marks were awarded on the basis of how detailed their explanation was. Many wrong answers were as a result of incorrect calculation. But many who gained the 2 marks did so by a surprising variety of answers. These included correct calculation ( $-2^{\circ}\text{C}$ ), use of a number line to demonstrate (in)correct numbers, and comparison of differencing ( $-7$  to  $-1$  is  $6^{\circ}$  but  $-1$  to  $3$  is  $4^{\circ}$  so not halved). Candidates seemed to thrive on the possibility of choosing their own explanation from the data.

##

This question was well answered. Many were able to write the number correctly in part (a), and give the correct value of the 6 in part (b). The main errors in part (c) included truncation to 4200 or rounding to the nearest 10.

##

It was encouraging to see many successful attempts at this question, even from those whose arithmetic throughout the rest of the paper was poor. Partitioning methods were popular, but often contained errors caused by extra zeros. Other typical errors were  $20 \times 30 = 5000$  instead of 6000, and  $40 \times 4 = 120$  or 80. Grid methods were also popular, but here it was usually poor totalling that let candidates down. Repeated addition was usually unsuccessful.

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Although most gave the correct answer, many were confused with the ten and multiplication was not uncommon. In part (b) most gave the correct answer, with the most common error being the 4.71 and 13.4 reversed. In part (c) both 0.7 and 0.70 were acceptable as answers. When 7.1, 7, 10 or other fractions were given as answers it was clear the candidate did not understand place value.

##

Students understanding of the demands of QWC (Quality of Written Communication) is still very weak. Whilst calculations were often accurate, few were able to adequately write a concluding statement to their solution.

Theme Park calculations were often thwarted by a misunderstanding of the ticket pricing; many thinking that tickets for each group of 10 cost a total of £6.50 or working out 30 lots of £6.50 and then adding £54 ( $£9 \times$  the remaining 6). The coach hire of £320 was usually correctly identified. In the calculations for the concert trip, the total ticket cost (£270) was usually found, but many candidates were unable to understand the costing of the train travel.

Some candidates mixed the method of travel with the wrong trip. Some credit was still available here for correct methods to find the separate costs.

- E16.** The ability of candidates to work with directed numbers was a strength, with most candidates gaining the marks. Success in part (b) was less than in part (a).
- E17.** Very few candidates failed to answer part (a) correctly. It was not surprising that more mistakes were made in ordering the decimals in part (b). The two most common errors were ignoring the decimal point (so that 3.71 appeared at the end of the list) and ordering the numbers from largest to smallest.
- E18.** This question differentiated well between candidates with the great majority achieving the marks in parts (a) and (b). Some candidates put their own brackets in part (b) and gave the answer 27. Only a third of candidates were able to give the correct answer to part (c). 45 was a more commonly seen answer here.
- E19.** All parts of this question were answered well with success rates of well over 90% for the first two parts and of over 80% for the last 3 parts. Tenths or ten were commonly seen incorrect answers to part (c). There was some incorrect rounding in parts (d) and (e). A small minority of candidates did not rounded to the accuracy required.
- E20.** Most candidates were able to identify the lowest temperature as  $-4^{\circ}\text{C}$  in part (a). Arithmetical errors prevented about 20% of the candidature gaining credit in part (b).

In part (c), very few candidates demonstrated any method; consequently many errors were made in finding the middle number. Had more candidates drawn and used number lines, many more would have been successful.

**E21.** Part (a) was, in the main, answered correctly; however in part (b), 4000 and 4120 were common errors.

**E26.** Part (a) was, in the main, answered correctly; however in part (b), 4000 and 4120 were common errors.

**E27.** Most candidates were able to identify the lowest temperature as  $-4^{\circ}\text{C}$  in part (a). Arithmetical errors prevented about 20% of the candidature gaining credit in part (b).

In part (c), very few candidates demonstrated any method; consequently many errors were made in finding the middle number. Had more candidates drawn and used number lines, many more would have been successful.

**E28.** All parts of this question were answered well with success rates of well over 90% for the first two parts and of over 80% for the last 3 parts. Tenths or ten were commonly seen incorrect answers to part (c). There was some incorrect rounding in parts (d) and (e). A small minority of candidates did not rounded to the accuracy required.

**E29.** This question differentiated well between candidates with the great majority achieving the marks in parts (a) and (b). Some candidates put their own brackets in part (b) and gave the answer 27. Only a third of candidates were able to give the correct answer to part (c). 45 was a more commonly seen answer here.

**E30.** Very few candidates failed to answer part (a) correctly. It was not surprising that more mistakes were made in ordering the decimals in part (b). The two most common errors were ignoring the decimal point (so that 3.71 appeared at the end of the list) and ordering the numbers from largest to smallest.

**E31.** The ability of candidates to work with directed numbers was a strength, with most candidates gaining the marks. Success in part (b) was less than in part (a).

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- E40.** Many candidates were able to score at least one mark for part (a) of this question. This was usually for obtaining a 7 in the unit column of their answer. A significant number of candidates were unable to obtain the correct answer. Common incorrect answers here were 217, 117 and 393. In part (b), many candidates were able to take 9 from 4 to get  $-5$ . A very common incorrect answer here was 5. Part (c) was done well by most candidates. Common incorrect answers here were 15 and 2. Part (d) was done well by the majority of candidates. It was rare to see this calculation set out as a long division- many just simply wrote down the answer. Common incorrect answers here were 60 and 250.
- E41.** This question was done well by the vast majority of candidates.
- Common errors in part (b) were  $-5$  and  $-7$ . Common errors in part (c) were Edinburgh and London.
- E42.** This question was well understood with 88% of candidates scoring full marks. A further 8% of candidates scored 1 mark either for showing a complete method or for sight of 19 or 51. Many candidates took away both 15 and 17 and got an answer of 2. They were awarded one mark for a misread of taking 15 and 17 away from 34.
- E43.** This question too was well understood with almost all candidates gaining full marks; however a small minority gave odd numbers instead of evens and 3 instead of a square number.



- E44.** This question was very well answered with almost all candidates gaining the full 3 marks.
- E45.** Part (a) was almost always correct but in part (b) the correct answer of 22 was rarely seen whilst the modal incorrect answer of 50 was seen frequently.
- E46.** This question was not very well understood as many candidates were happy that the incorrect answer was, in fact, correct. Only 56% of candidates were able to correctly give a correct reason as to how 24 was in fact obtained or how to correctly calculate  $15 - 3 \times 2$  as 9. Some candidates indicated that brackets were needed but gave no indication as to their placement to make a true statement.
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**E48.** Part (a) was almost always correct but in part (b) the correct answer of 22 was rarely seen whilst the modal incorrect answer of 50 was seen frequently.

**E49.** This question was very well answered with almost all candidates gaining the full 3 marks.

**E50.** This question too was well understood with almost all candidates gaining full marks; however a small minority gave odd numbers instead of evens and 3 instead of a square number.

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**E52.** This question was done well by the vast majority of candidates.

Common errors in part (b) were  $-5$  and  $-7$ . Common errors in part (c) were Edinburgh and London.

**E53.** Many candidates were able to score at least one mark for part (a) of this question. This was usually for obtaining a 7 in the unit column of their answer. A significant number of candidates were unable to obtain the correct answer. Common incorrect answers here were 217, 117 and 393. In part (b), many candidates were able to take 9 from 4 to get  $-5$ . A very common incorrect answer here was 5. Part (c) was done well by most candidates. Common incorrect answers here were 15 and 2. Part (d) was done well by the majority of candidates. It was rare to see this calculation set out as a long division- many just simply wrote down the answer. Common incorrect answers here were 60 and 250.

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