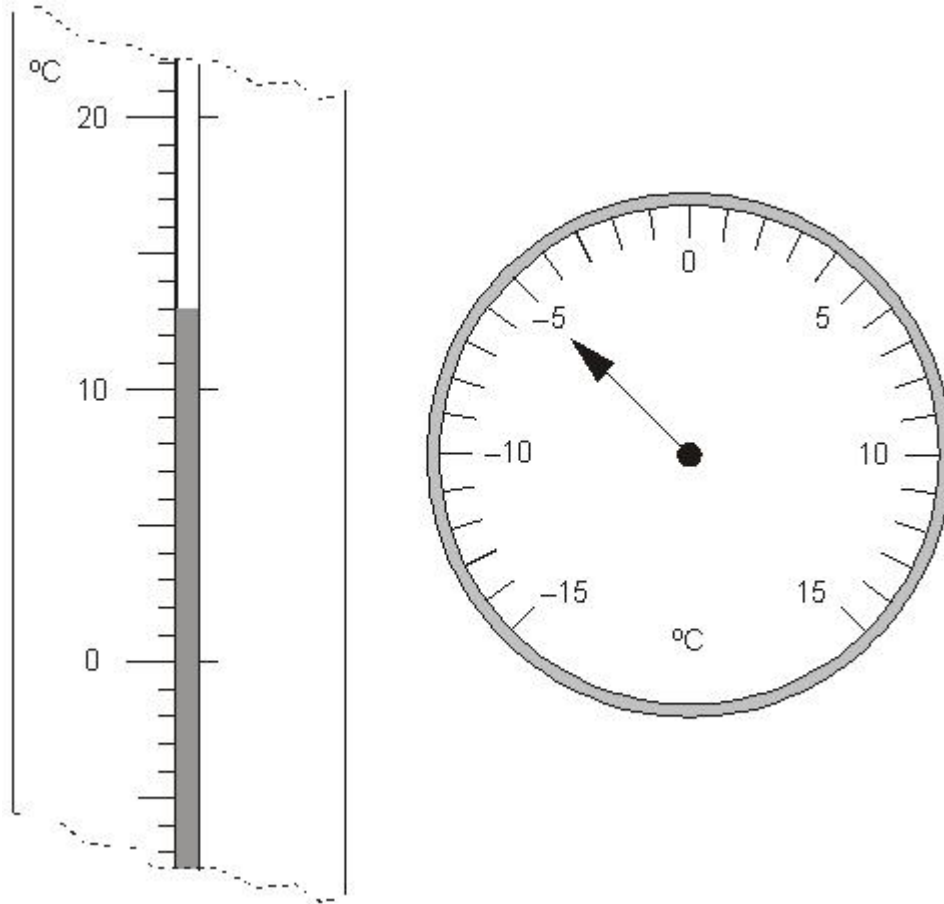


**Q1.**

Here are two thermometers.

They show two different temperatures.



What is the **difference** between the two temperatures?

1 mark

**Q2.**

Mr Tyler is 1.97 m tall.

His young daughter is 83 cm tall.

What is the **difference** in their heights, **to the nearest 10 cm**?

1 mark

**Q3.**

Write the answers to these calculations in Roman numerals.

One has been done for you.

$$V + VI = XI$$

$$IX + XLV = \boxed{\phantom{0000}}$$

$$XC - XXIV = \boxed{\phantom{0000}}$$

2 marks

**Q4.**

Look at this number.

697,432

What is the value of the digit **6** in the number?

Circle the correct answer.

six thousand      six hundred thousand

sixty thousand      six million

1 mark

**Q5.**

Circle the largest number.

5,055,555      5,555,055      555,555      5,055,055

1 mark

**Q6.**

Circle the largest number.

4,944,444      4,444,944      4,994,449      444,444      4,949,444

1 mark

**Q7.**

Look at these numbers written in Roman numerals.

One is not written correctly.

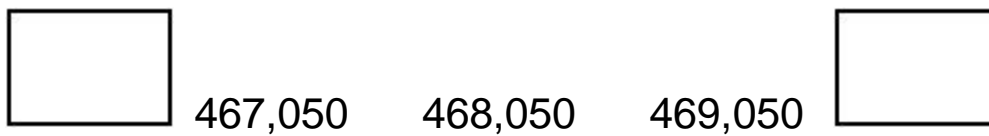
Put a cross (X) on it.

MMCM      MCMM      MMMC      MMCC      MCCC

1 mark

**Q8.**

Write the missing numbers in the sequence.



2 marks

**Q9.**

Write the three missing numbers in the empty boxes.

	+10 →			
+10,000 ↓	45,170	45,180	45,190	
	55,170			
	65,170			

2 marks

**Q10.**

Look at these numbers written in Roman numerals.

MCMVII      MMCD      MDCCXLIII      MMDX

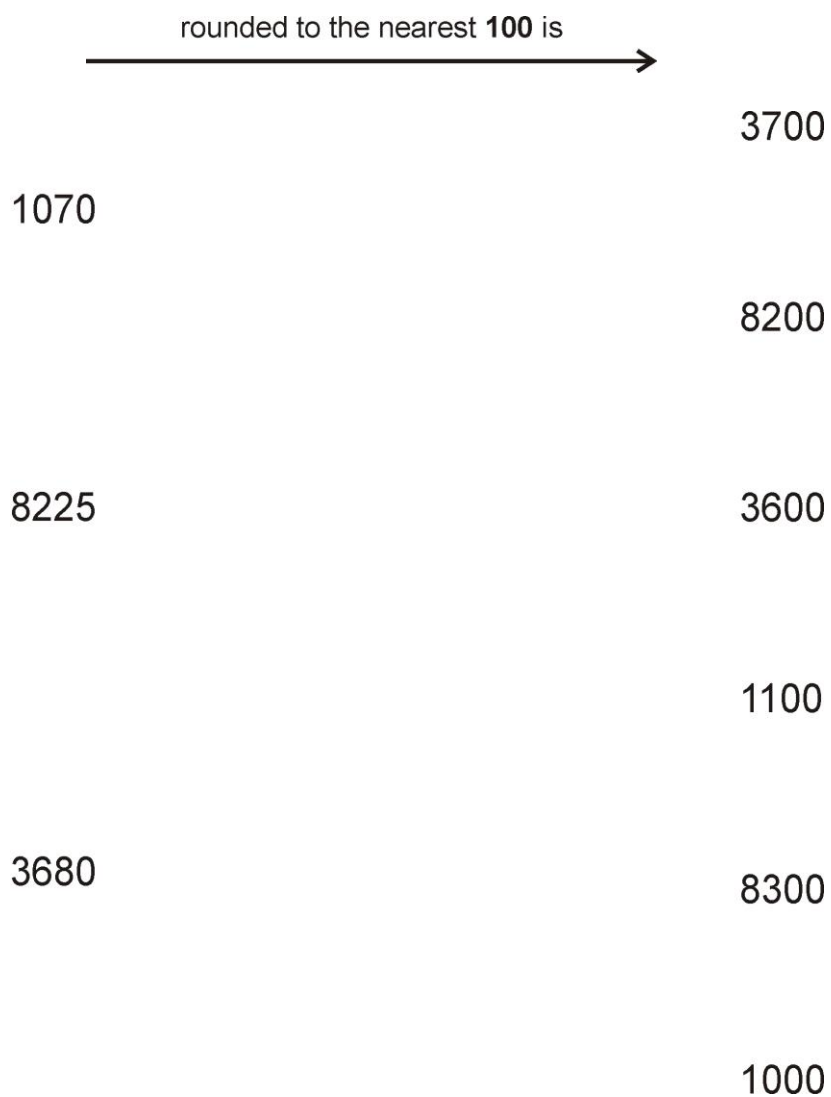
Circle the **largest** number.

What is the value of the **smallest** number?

2 marks

**Q11.**

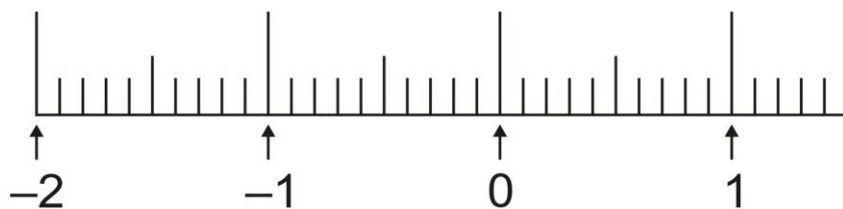
Draw arrows.



1 mark

**Q12.**

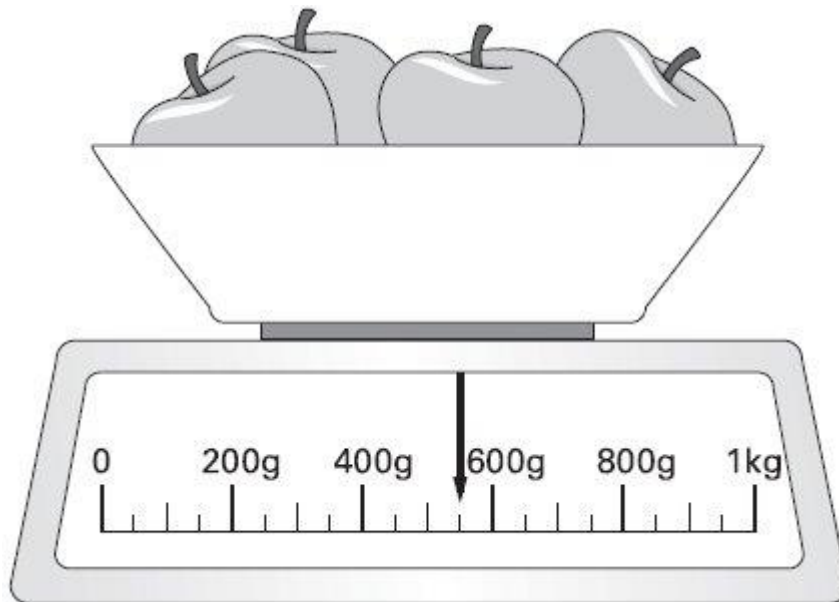
Mark with arrows the points **-1.5** and **0.45** on the number line.



2 marks

**Q13.**

Here are some apples.



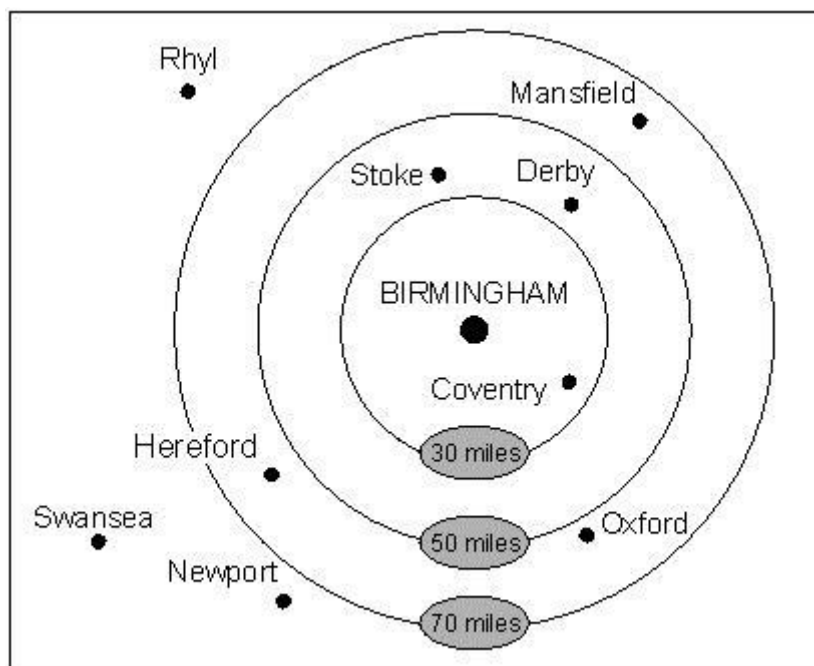
What is the total weight of these apples?

 g

1 mark

**Q14.**

This diagram shows the distances of different towns from Birmingham.



Write the name of a town which is **between 30 and 50 miles** from Birmingham.

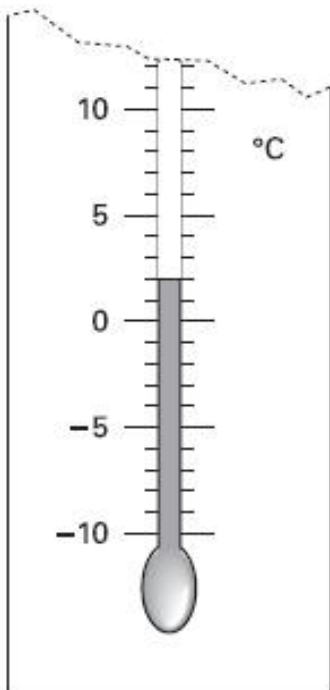
1 mark

Use the diagram to estimate the distance in **miles** from **Birmingham** to **Mansfield**.

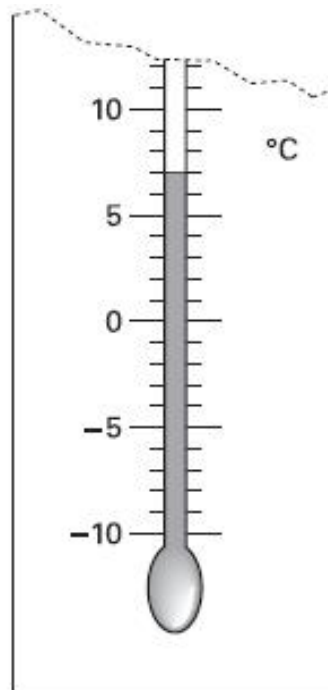
1 mark

### Q15.

These are the temperatures in York and Rome on a day in winter.



York



Rome

How many degrees **colder** is it in York than in **Rome**?

1 mark

On another day, the temperature in York is **4°C**

Rome is **7 degrees colder** than York.

What is the temperature in **Rome**?

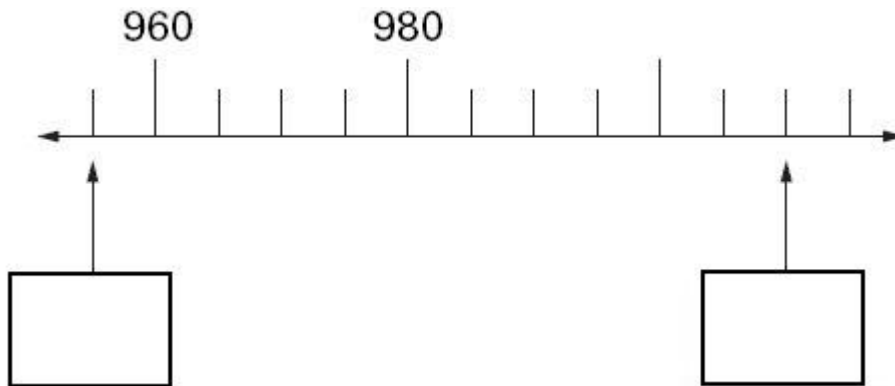
°C
----

1 mark

**Q16.**

Here is part of a number line.

Write the two missing numbers in the boxes.



2 marks

**Q17.**

Here is part of a number grid.

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Here is another part of the **same** grid.

Write in the missing number.





	nearest hundred
316	300
3162	
31628	
316281	

2 marks

**Q20.**

Complete the table.

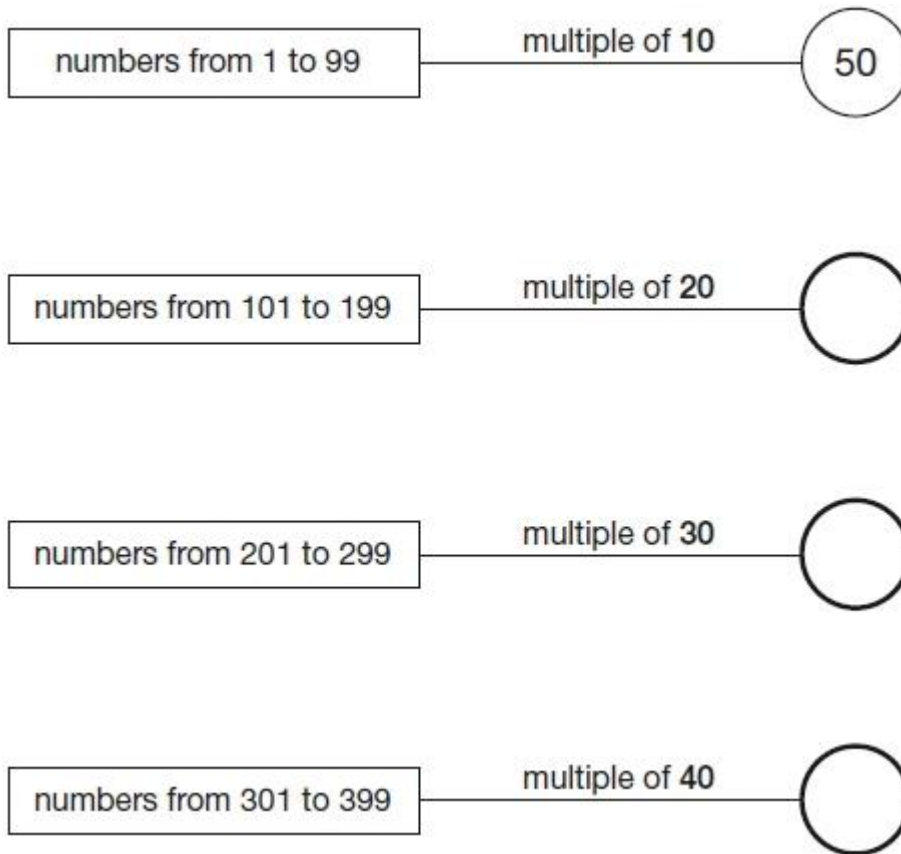
	<b>Round 39,476</b>
to the nearest 10,000	
to the nearest 1,000	
to the nearest 100	

2 marks

**Q21.**

In the circles, write a multiple that belongs to each set.

One has been done for you.



2 marks

**Q22.**

Write the number 53,148 in **words**.

---

1 mark

**Q23.**

Look at this number.

23,451.96

Write the **digit** that is in the hundreds place.

1 mark

Write the **digit** that is in the hundredths place.

Q24.

3,576,219

Which digit is in the **ten thousands** place?

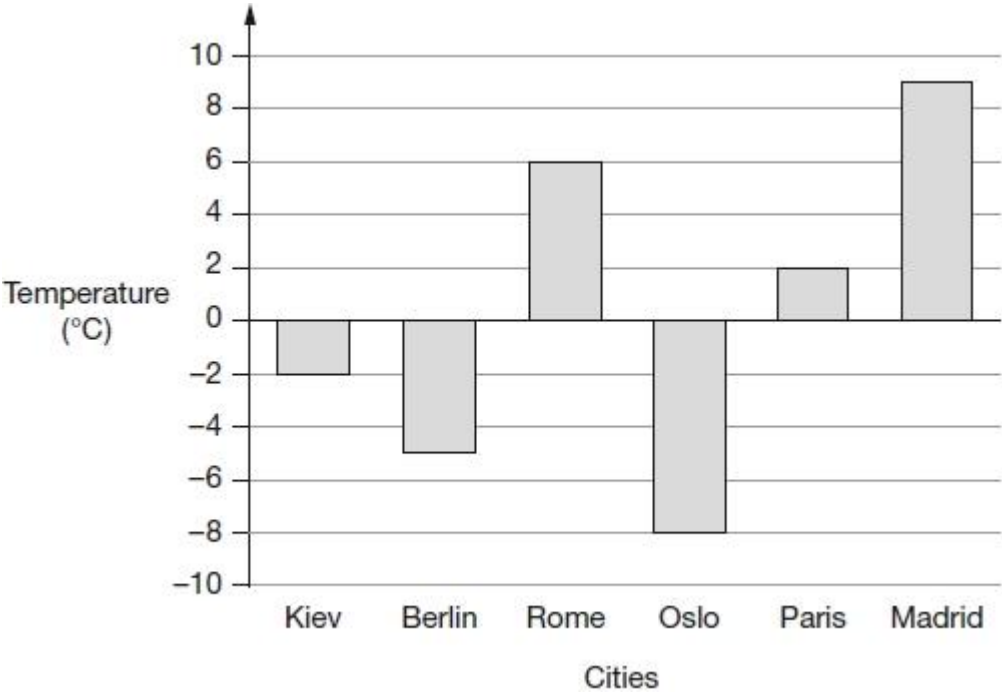
1 mark

Round 3,576,219 to the **nearest million**.

1 mark

Q25.

This graph shows the temperature in six cities on one day in January.



Which city was 4 degrees **warmer** than Kiev?

\_\_\_\_\_ 1 mark


What was the **difference** between the temperature in Oslo and the temperature in Berlin?

°C
----

1 mark


**Q26.**

**A**




£135,300

**B**




£119,125

**C**




£130,500

**D**



£131,500

**E**



£91,500

Put these houses in order of price starting with the **lowest price**.

One has been done for you.

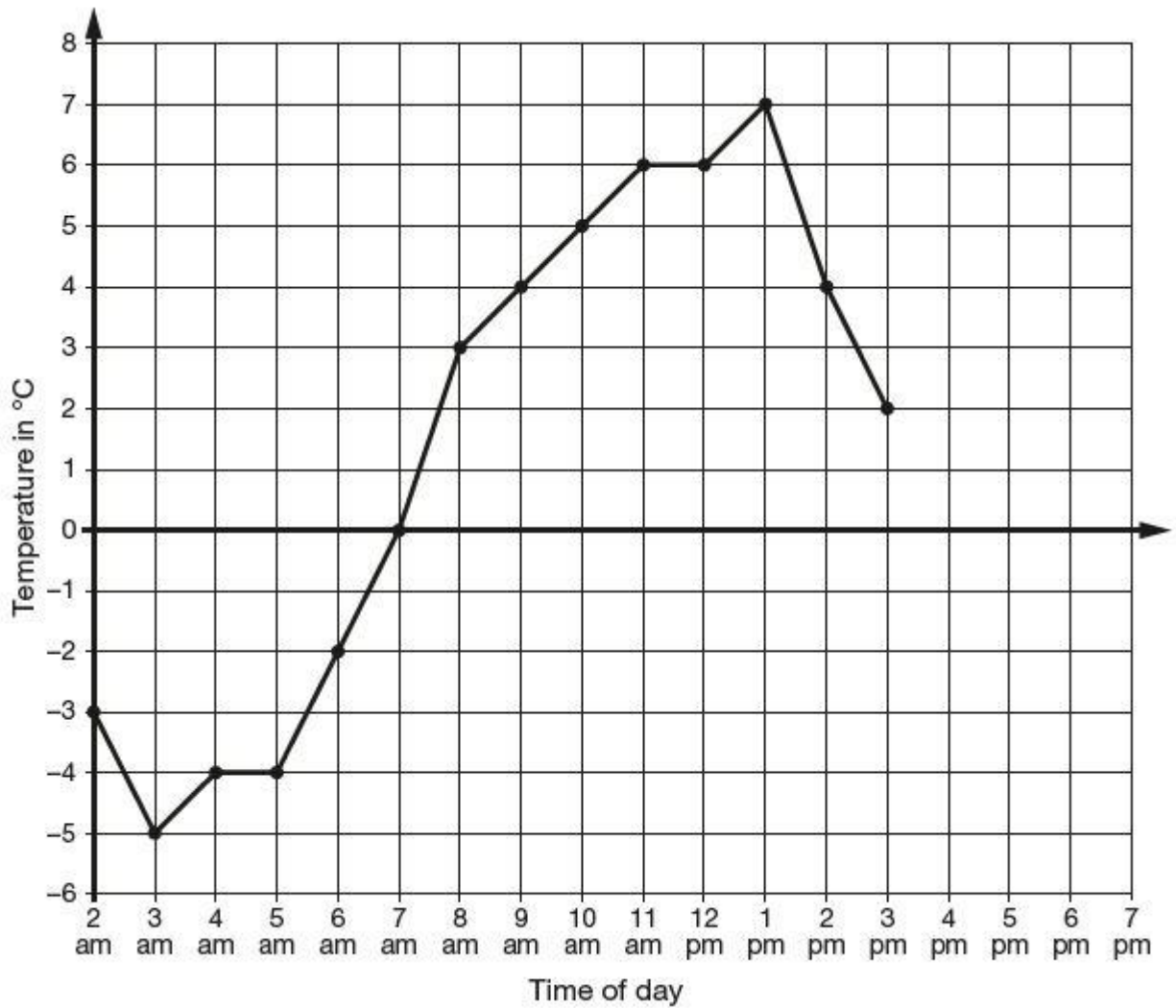
\_\_\_\_\_ **B** \_\_\_\_\_

lowest

1 mark

**Q27.**

This graph shows the temperature in °C from 2 am to 3 pm on a cold day.



How many degrees **warmer** was it at 3 pm than at 3 am?

 °C

1 mark

At 6 pm the temperature was 4 degrees lower than at 3 pm.

What was the temperature at 6 pm?

 °C

1 mark

**Q28.**

The numbers in this sequence **decrease** by the same amount each time.

303,604      302,604      301,604      300,604      ...

What is the next number in the sequence?

1 mark

**Q29.**

At the end of a film, the year is given in Roman numerals.



Write the year MMVI in **figures**.

1 mark

**Q30.**

Round **84,516**

to the nearest 10

to the nearest 100

to the nearest 1,000

2 marks

**Q31.**

The list below shows the years in which the Cricket World Cup was held since 1992:

1992, 1996, 1999, 2003, 2007, 2011, 2015

Adam says,

The Cricket World Cup has been held every four years since 1992.



Adam is **not** correct.

Explain how you know.

1 mark

**Q32.**

A car costs **more** than **£8600** but **less** than **£9100**

Tick (✓) the prices that the car could cost.

- £8569
- £9090
- £9130
- £8999

1 mark

Mark schemes

**Q1.**

18

*Accept – 18*

[1]

**Q2.**

1. 1 m or 110 cm

[1]

**Q3.**

LIV

1

LXVI

1

[2]

**Q4.**

six hundred thousand indicated

[1]

**Q5.**

5,555,055 indicated

[1]

**Q6.**

4,994,449 indicated

[1]

**Q7.**

~~MCM~~

*Accept other clear indication*

[1]

**Q8.**

466,050

1



470,050

1

[2]

**Q9.**

Award **TWO** marks for numbers placed correctly, as shown.

45,170	45,180	45,190	<b>45,200</b>
55,170			
65,170		<b>65,190</b>	
<b>75,170</b>			

Award **ONE** mark for any two numbers placed correctly.

[2]

**Q10.**

MMDX indicated

*Do not accept MDCCXLIII*

1

1743

1

[2]

**Q11.**

1070 → 1100

8225 → 8200

3680 → 3700

*All correct for 1 mark.*

[1]

**Q12.**

The gradation corresponding to  $-1.5$  correctly indicated on the number line

1

*It is not necessary for the point to be labelled  $-1.5$*

*It is not necessary for the point to be marked with an arrow.*

A point corresponding to  $0.45$  correctly indicated on the number line

1

*It is not necessary for the point to be labelled  $0.45$*

*Accept any point marked that is clearly **between** the gradations for  $0.4$  and  $0.5$*

*It is not necessary for the point to be marked with an arrow.*

[2]

**Q13.**

550

*Accept 0.5 kg.*

[1]

**Q14.**

(a) Derby **OR** Stoke

*Accept recognisable misspellings  
**OR** unambiguous indications on the diagram.*

1

(b) Answer in the range 60 to 65 inclusive.

1

[2]

**Q15.**

(a) 5

1

(b)  $-3$  **OR** minus 3

*Accept '3 degrees below zero' or similar **OR**  $-3$ ' written on either thermometer.*

***Do not** accept '3-' **OR** a mark on the thermometers such as a cross, unless the numerical answer is written.*

1

[2]

**Q16.**

(a) 955 in first box.

1

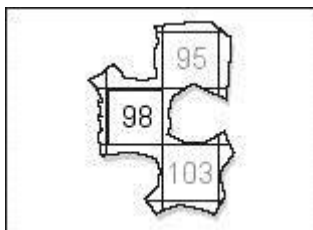
(b) 1010 in second box.

1

[2]

**Q17.**

Chart completed as shown:



[1]

**Q18.**

Award **TWO** marks for a multiple of 15 which is greater than 100, eg

105 **OR** 120 **OR** 135 **OR** 150 **OR** 300

*Accept more than one answer if all are correct.*

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

*Accept for **ONE** mark 30, 45, 60, 75 **OR** 90*

- 90 93 96 99 102 105 108 ...  
90 95 100 105 110 115 ... ← Not spotting matching number (105)
- 90 93 96 98 101 104 107 (110) ...  
90 95 100 105 (110) 115 ... ← One step size incorrect (96 to 98)
- 15 30 45 60 75 80 95 110 (125) ... ← One step size incorrect (75 to 80)
- $3 \times 5 \times 20$   
OR  
 $15 \times 10$  ← Multiple greater than 100 but not calculated

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

Up to 2

[2]

### Q19.

Award **TWO** marks for three numbers correct as shown:

	rounded to the nearest hundred
316	300
3162	3200
31628	31600
316281	316300

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

Up to 2

[2]

### Q20.

Award **TWO** marks for the correct completion of the three numbers in the table, as shown:

	Round 39,476
to the nearest 10,000	<b>40,000</b>
to the nearest 1,000	<b>39,000</b>
to the nearest 100	<b>39,500</b>

If the answer is incorrect, award **ONE** mark for **any two** of the numbers rounded correctly.

**Do not** accept 9,000 or 500 for the second and third entries.

Up to 2m

[2]

**Q21.**

Award **TWO** marks for three rows completed correctly as shown:

50

**(120)** OR 140 OR 160 OR 180

**(210)** OR 240 OR 270

**(320)** OR 360

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

Up to 2

[2]

**Q22.**

Fifty-three thousand, one hundred and forty-eight.

[1]

**Q23.**

(a) 4

**Do not** accept four OR 400

1

(b) 6

**Do not** accept six OR  $\frac{6}{100}$

1

**Commentary:** This question assesses place value in whole numbers up to 1,000,000 (5N3a) and in decimals (5F6b).

[2]

**Q24.**

(a) 7

**Do not** accept 70,000 or 70 thousands.

1m

(b) 4,000,000

Accept 4 million or four million

**Do not** the answer 4

1m

[2]

**Q25.**

- (a) Paris 1
- (b) 3
- Do not accept -3.*

1 [2]

**Q26.**

Award **ONE** mark for the correct answer as shown:

- E B C D A

*Accept:*

- £91,500 B £130,500 £131,500 £135,300

[1]

**Q27.**

- (a) 7 1

*Do not accept -7 or 7-*

- (b) -2 1

*Do not accept 2-*

[2]

**Q28.**

299,604

[1]

**Q29.**

2006

*Do not accept 'two thousand and six' in words.*

[1]

**Q30.**

Award **TWO** marks for three boxes completed correctly as shown:

to the nearest 10	<input type="text" value="84,520"/>
to the nearest 100	<input type="text" value="84,500"/>
to the nearest 1,000	<input type="text" value="85,000"/>

If the answer is incorrect, award **ONE** mark for two boxes completed correctly.

Up to 2m

[2]

**Q31.**

Explanation that recognises that the sequence does not always increase by four, with clear reference to the data, e.g.

- The difference between 1996 and 1999 is three years, not four so it is not always every four years
- It would be 2000 if it was every 4 years
- It should have ended in 2016

**OR**

Explanation that demonstrates that the sequence does not always increase by 4, but does not reference specific years from the data, e.g.

- The cricket world cup was sometimes 3 years apart instead of 4 years apart
- Not all of the years have 4 years difference between.

**Do not accept vague or incomplete explanations, e.g.**

- *It does not always increase by four*
- *It should be 2000*
- *The difference can be 3, 4 or 5 years at different times.*

**Do not accept explanations which include incorrect mathematics or incorrect information that is relevant to the explanation, e.g.**

- $1992 + 4 = 1996 + 3 = 1999$

[1]

**Q32.**

Boxes completed as shown:

£ 8569

£ 9090

£ 9130

£ 8999



**Both** answers must be correct for the award of the mark.  
Accept alternative unambiguous indications, such as 'Yes'.  
Ignore crosses or 'No' in the other boxes, provided it is clear  
that the correct two prices have been chosen.

[1]