

**Q1.**

The table below shows five journeys a taxi driver made one day.

journey number	start time	number of passengers	distance	cost
1	9:15 am	2	8 km	£7.50
2	9:40 am	1	12 km	£9.90
3	10:30 am	3	7 km	£7.60
4	10:50 am	1	21 km	£15.50
5	12:10 pm	4	15 km	£12.00

On journey number 5, the passengers shared the cost equally.

How much did **each** passenger pay?

£

1 mark

How many **passengers** made journeys of more than 10 km?

passengers

1 mark

The 12 km journey took 40 minutes.

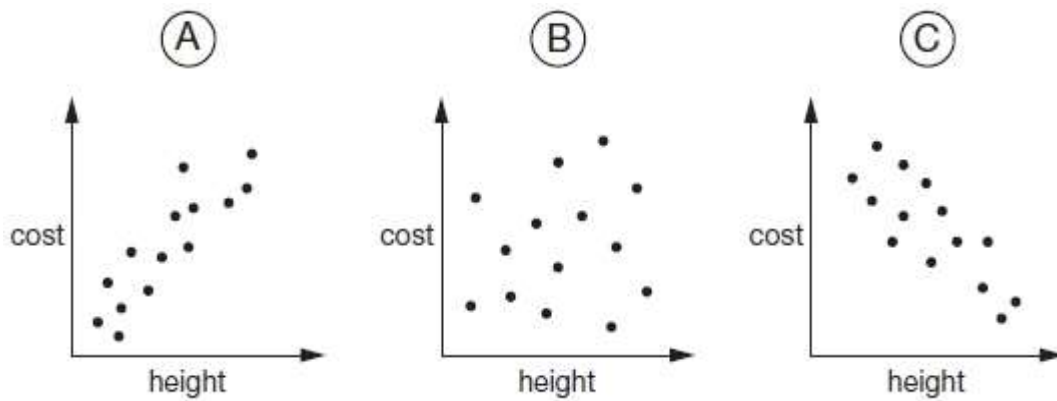
What time did the taxi finish its journey?

am

1 mark

**Q2.**

Here are three scatter graphs showing the heights of people and the cost of clothes.



Chen says,

***'The taller you are, the more your clothes cost.'***

Megan says,

***'The shorter you are, the more your clothes cost.'***

Alfie says,

***'There is no relationship between your height and what your clothes cost.'***

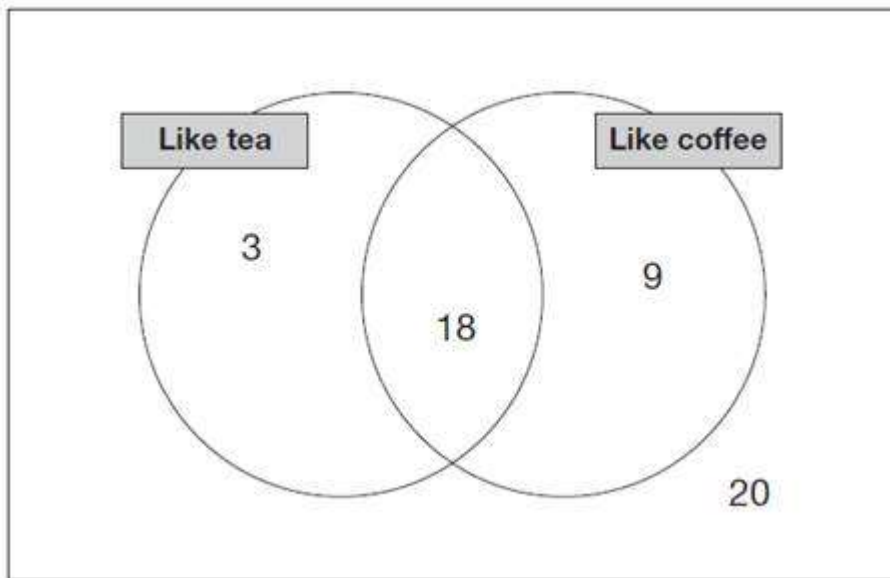
Write the letter of each scatter graph that shows what each person says.

Chen \_\_\_\_\_ Megan \_\_\_\_\_ Alfie \_\_\_\_\_ 1 mark

**Q3.**

In a survey people were asked if they like tea and coffee.

The results are in this Venn diagram.



(a) What **percentage** of people in the survey like **both** tea and coffee?

1 mark

(b) What **percentage** of people in the survey do **not** like coffee?

1 mark

**Q4.**

Three apples have a **mean** (average) mass of 100 grams.

The largest apple is removed.

The **mean** mass of the remaining two apples is 70 grams.



What is the mass of the largest apple?

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**?

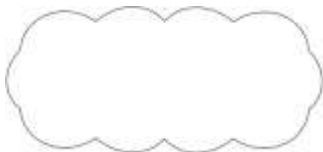
1 mark

Amy says,

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

Amy is correct.

Explain how you know.

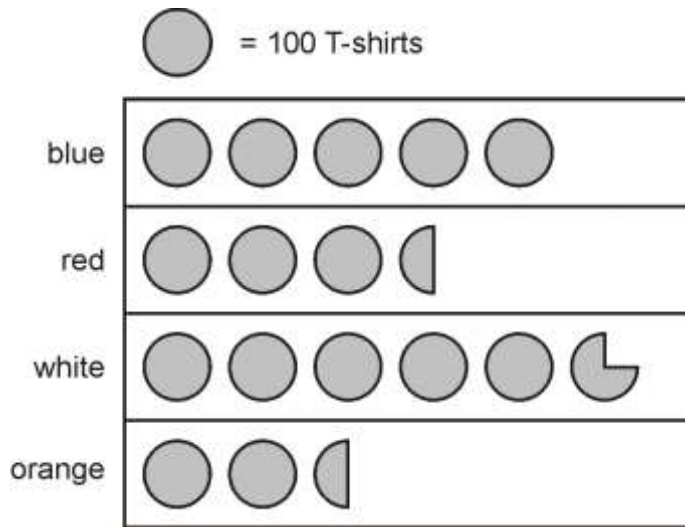


1 mark

**Q6.**

A shop sells T-shirts.

This chart shows how many T-shirts were sold in a month.



Write the colours of the T-shirts that sold **more than 400** in the month.

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

How many red T-shirts and orange T-shirts were sold **altogether**?

1 mark

How many **more** white than blue T-shirts were sold?

1 mark

**Q7.**

There are 90 children in Year 6 at Woodland Junior School.

They are split into three classes.

Class	Number in class
<b>6M</b>	27
<b>6P</b>	33
<b>6T</b>	30

Each child chose football **or** netball **or** hockey.

In **6M**, 13 children chose hockey.

The rest of the class were split equally between football and netball.

In **6P**, 9 children chose netball.

Twice as many children chose football as chose hockey.

In **6T**, the ratio of children who chose football to netball to hockey was 1:2:3

Complete this table.

Class	Number in class	Football	Netball	Hockey
<b>6M</b>	27			13
<b>6P</b>	33		9	
<b>6T</b>	30			

2 marks

**Q8.**

Megan likes honey, but not jam.

Alfie likes honey and jam.

Chen does not like honey or jam.

Donna only likes jam.

Write the children's names in the correct parts of the sorting diagram.

	likes honey	does <b>not</b> like honey
likes jam		
does <b>not</b> like jam		

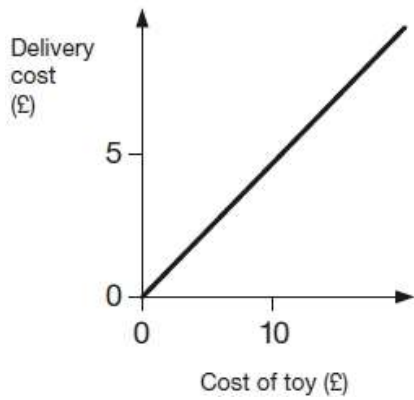
2 marks

**Q9.**

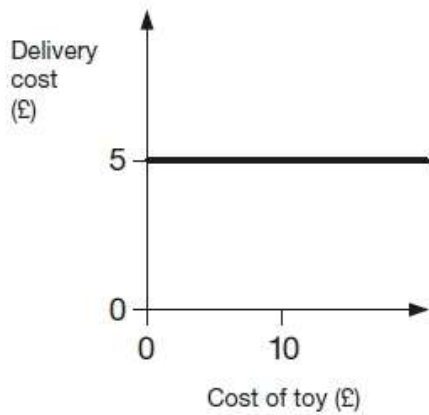
Two companies sell toys online. They charge to deliver.

Describe the delivery cost of the second company.

The first company is done for you.



The more a toy costs, the more  
the delivery costs.



\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1 mark

**Q10**

These are some prices in a fish and chip shop.

Fish £2.30	Peas 35p
Sausage £1.80	Curry sauce 40p
Chips (small bag) 60p	Bread roll 30p
Chips (large bag) 90p	Pickled onion 28p

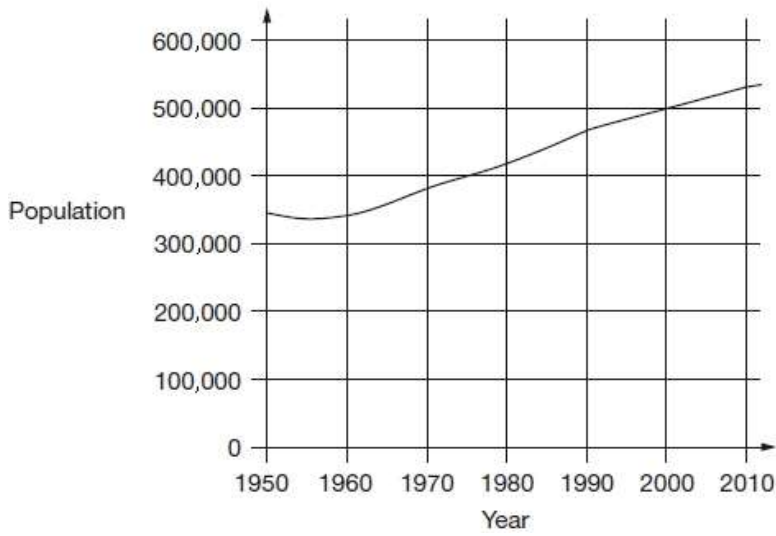
Alfie buys one fish, a large bag of chips and a pickled onion. How much does he pay? 1 mark

Megan buys a sausage and a bread roll. Chen buys a small bag of chips and a curry sauce. How much **more** does Megan pay than Chen? 2 marks



**Q11.**

This chart shows the population of Cornwall from 1950 to 2010.



Look at the chart.

In which year did the population first reach 400,000?

1 mark

How much did the population increase from 1950 to 2000?

1 mark

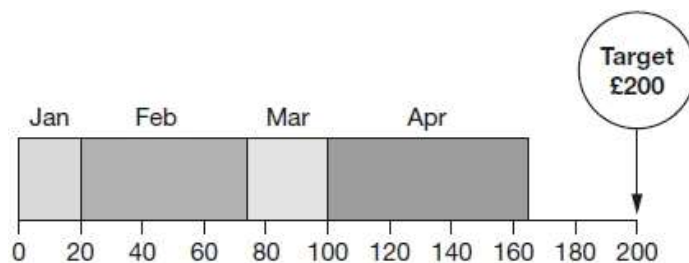
What was the population of Cornwall in 2010?

1 mark

**Q12.**

A school plans to collect £200 between January and May.

This chart shows how much they collected by the end of April.



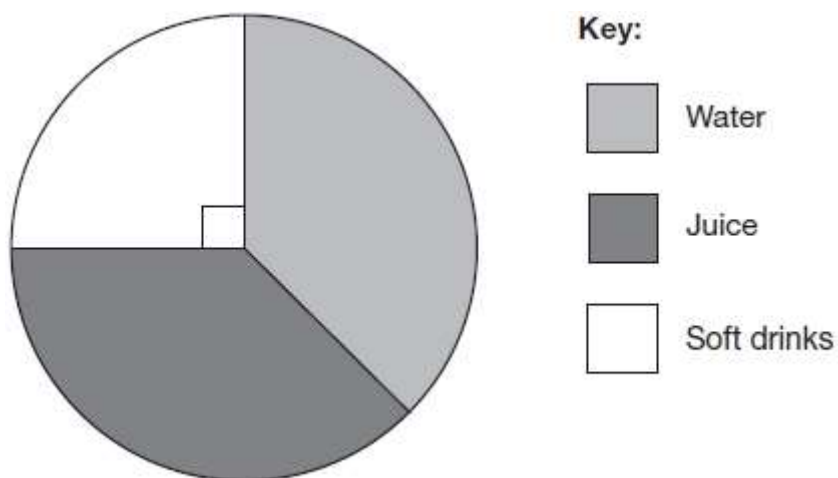
**Amount of money collected in £**

Write the name of **each** month where they collected more than £50  
How much money did they collect in February and March **altogether**?

**Q13.**

A shop sells drinks.

The pie chart compares the money a shop took last year for water, juice and soft drinks.



The shop took £8,264 for soft drinks.

Sales of water and juice were **equal**.

How much money did the shop take for **juice** last year?

2 marks

**Q14.**

Here is a diagram for sorting numbers.

Write **one number** in each box.

One is done for you.

	multiple of 5	not a multiple of 5
multiple of 3	30	
not a multiple of 3		

2 marks

**Q15.**

Seven children measured their heights.

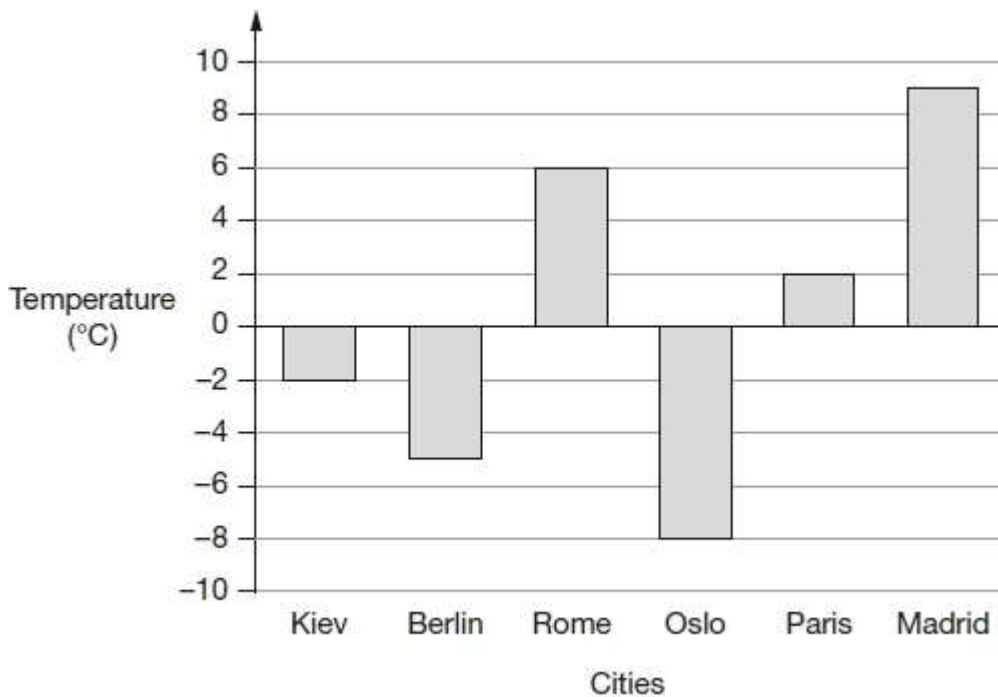
Children	Height (cm)
Stefan	144
Lara	136
Olivia	142
Chen	143
Maria	152
Dev	148
Sarah	150

What is the mean height of the children?

2 marks

**Q16.**

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?

1 mark

**Q17.**

Here are the temperatures in four cities at midnight and at midday.

	Temperature	
City	At midnight	At midday
Paris	-4°C	-2°C
Oslo	-13°C	-7°C
Rome	3°C	10°C
Warsaw	-6°C	2°C

At **midnight**, how many degrees colder was Paris than Rome?

1 mark

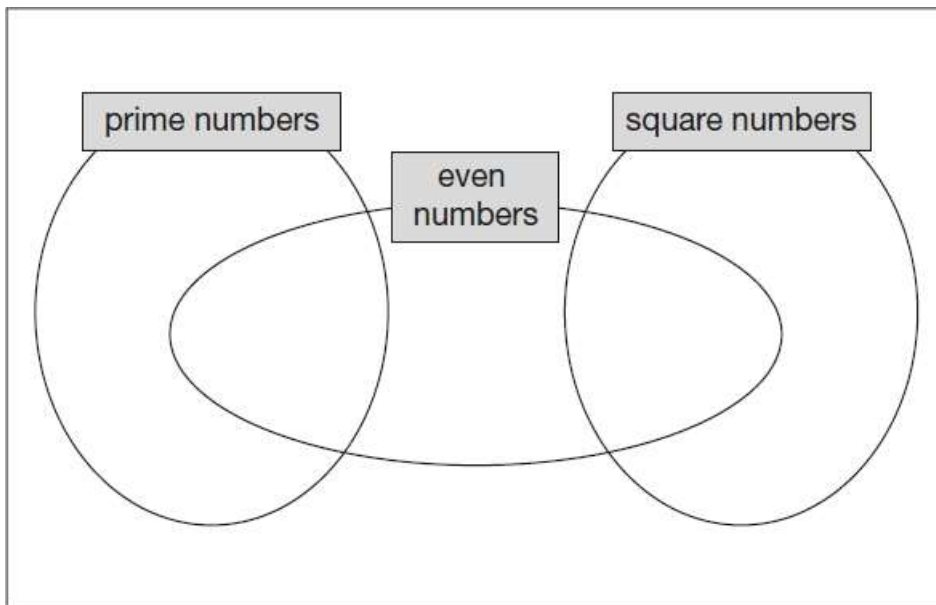
Which city was 6 degrees colder at midnight than at midday?

1 mark

**Q18.**

Write each number in its correct place on the diagram.

16      17      18      19



2 marks

**Q19.**

Last year, Jacob went to four concerts.

Three of his tickets cost £5 each.



The other ticket cost £7



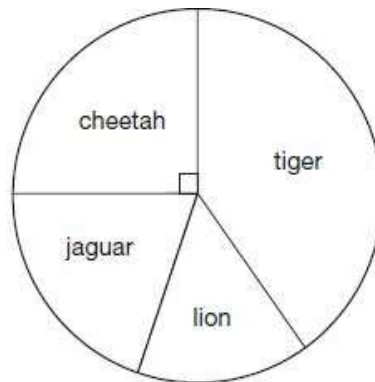
What was the **mean** cost of the tickets?

2 marks

**Q20.**

This chart shows the number of different types of big cat in a zoo.

There are **20** big cats in the zoo altogether.



Here are some statements about the chart.

Tick the statements that are **true**.

There are more cheetahs than jaguars.

The total number of lions and tigers is 10.

One-quarter of the big cats are cheetahs.

There are more than 5 jaguars.

2 marks

**Q21.**

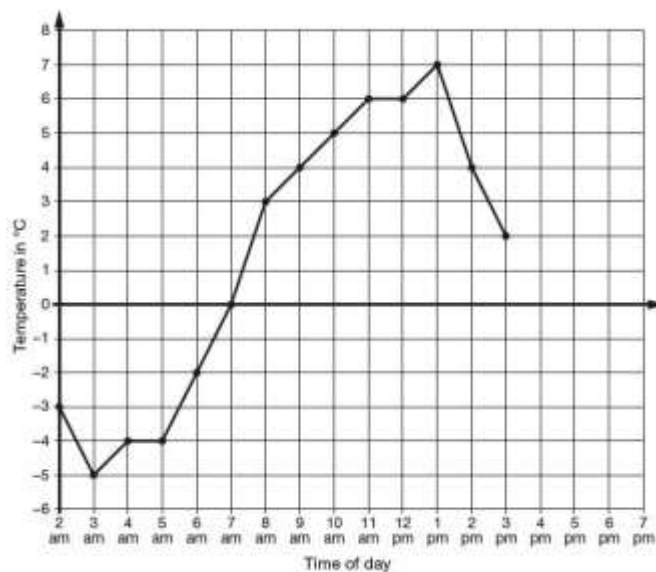
This table shows the heights of three mountains.

Mountain	Height in metres
Mount Everest	8,848
Mount Kilimanjaro	5,895
Ben Nevis	1,344

How much higher is Mount Everest than the combined height of the other two mountains?

**Q22.**

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?

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

What was the temperature at 6 pm?

## Mark schemes

### Q1.

(a) £3.00

1

(b) 6

1

(c) 10:20 am

*The answer is a specific time.*

1

[3]

### Q2.

Identifies all three graphs correctly, ie:

- Chen **A**    Megan **C**    Alfie **B**

*Accept unambiguous indications of the correct graph for each person, eg:*

- *Names written on scatter graphs*

[1]

### Q3.

(a) 36

*Do not accept equivalent fractions or decimals*

1

(b) 46

*Do not accept equivalent fractions or decimals*

1

[2]

### Q4.

160

*! Measures*

*See guidance*

2

**or**

Shows or implies a complete correct method, eg:

- $3 \times 100 = 300$

$$2 \times 70 = 140$$

$$300 - 140$$

1

[2]

**Q5.**

(a) 109

1

(b) An explanation that recognises that 100 people get up before 9am which is two-thirds of the total (150).

- '13 + 28 + 59 = 100 which is two-thirds of the total'

- ' $\frac{1}{3}$  of 150 = 50 and  $2 \times 50 = 100$ '

- ' $\frac{2}{3}$  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]

**Q6.**(a) blue **AND** white

*Colours may be given in either order.*

*Accept unambiguous abbreviations or recognisable misspellings.*

1

(b) 600

1

(c) 75

1

[3]

**Q7.**

Completes all 7 entries in the table correctly, ie:

	No.	Football	Netball	Hockey
6M	27	7	7	13
6P	33	16	9	8
6T	30	5	10	15

2



**or**

Completes the first two rows (6M & 6P) correctly

**OR**

Completes the third row (6T) correctly

1

[2]

**Q8.**

Award **TWO** marks for four names correctly placed on the diagram as shown:

Alfie	Donna
Megan	Chen

If the answer is incorrect, award **ONE** mark for three names correctly placed.

*Accept unambiguous abbreviations or recognisable misspellings.*

**Do not** accept names written in more than one section.

Up to 2

[2]

**Q9.**

Gives a correct description that indicates the delivery cost is constant, eg:

- The delivery cost is always £5
- The cost is always £5 no matter how much the toy costs
- Delivery stays the same as the cost of toy increases

*Accept minimally acceptable explanation, eg:*

- *It is £5*

*Accept omission of the actual delivery cost, eg:*

- *It always costs the same*
  - *The cost is the same*
  - *The cost of the toy does not affect the delivery cost*
- !** *Condone correct response with the pound sign omitted, eg:*

- *It is always 5*

**!** *Condone explanations which refer to toys costing up to £20*

**Do not accept** incomplete or ambiguous explanation, eg:

- *They are equal amounts*

[1]

**Q10.**

(a) £3.48 1

(b) Award **TWO** marks for the correct answer of £1.10

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

■  $£1.80 + 30p = £2.10$

$60p + 40p = £1.00$

$£2.10 - £1.00 = \text{wrong answer}$

*Accept for **ONE** mark £110 **OR** £110p as evidence of appropriate working.*

*Working must be carried through to reach an answer for the award of **ONE** mark.*

Up to 2

[3]

**Q11.**

(a) 1974 **OR** 1975 **OR** 1976 1

(b) A whole number answer in the range 130 000 to 180 000 **inclusive**. 1

(c) A whole number answer in the range 510 000 to 550 000 **exclusive**.  
**Do not accept 510 000 **OR** 550 000** 1

[3]

**Q12.**

(a) February and April in either order.  
*Accept alternative unambiguous indications, e.g. F and A.*  
**Do not accept the amounts collected in February and April, i.e. £55 and £65** 1

(b) £80 1

[2]

**Q13.**

Award **TWO** marks for the correct answer of £12396.

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

■ 
$$\begin{array}{r} £8264 \\ \times \quad 4 \\ \hline £33056 \end{array}$$

**OR**

$$\begin{array}{r} \text{£}33056 \\ - \quad 8264 \\ \hline \text{£}24792 \end{array}$$

$$\text{£}24792 \div 2$$

**OR**

- $\text{£}8264 \div 2 = \text{£}4132$   
 $\text{£}8264 + \text{£}4132$

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

Up to 2

[2]

**Q14.**

Award **TWO** marks for three boxes completed correctly, e.g:

	multiple of 5	<b>not</b> a multiple of 5
multiple of 3	30	<b>3, 6, 9 etc</b>
<b>not</b> a multiple of 3	<b>5, 10, 20 etc</b>	<b>1, 2, 4, 7 etc</b>

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

*Accept more than one correct multiple in any box.*

**Do not** accept any box containing a correct multiple and an incorrect number.

Up to 2

[2]

**Q15.**

Award **TWO** marks for the correct answer of 145

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

- $$\begin{array}{r} 144 \\ 136 \\ 142 \\ 143 \\ 152 \\ 148 \\ + 150 \\ \hline 1015 \end{array}$$

$$1015 \div 7$$

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

**Q16.**

(a) Paris

1

(b) 3

*Do not accept -3.*

1

[2]

**Q17.**

(a) 7

*Do not accept -7 or 7-*

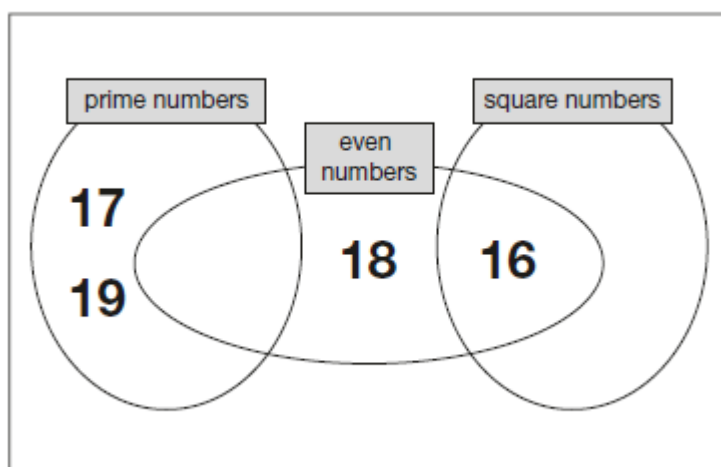
1

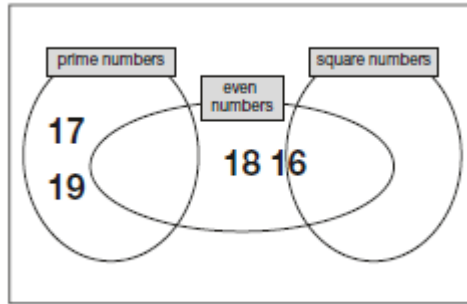
(b) Oslo

*Accept unambiguous abbreviations or recognisable misspellings.*

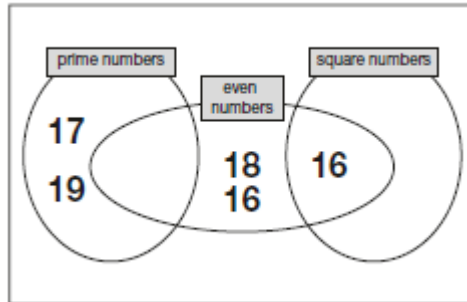
1

[2]

**Q18.**Award **TWO** marks for all four numbers placed correctly as shown:If the answer is incorrect, award **ONE** mark for three numbers placed correctly.*Accept alternative unambiguous indications, e.g. lines drawn from the numbers to the appropriate regions of the diagram.**Do not accept numbers written in more than one region, e.g.*



OR



Up to 2m

[2]

**Q19.**

Award **TWO** marks for the correct answer of £5.50

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

- sight of  $22 \div 4$

OR

- evidence of appropriate method, e.g.
  - 3 tickets cost  $3 \times \text{£}5 = \text{£}15$
  - 1 ticket costs  $\text{£}7$
  - $\text{£}15 + \text{£}7 = \text{£}22$
  - $\text{£}22 \div 2 \div 2$

*For **ONE** mark, accept an answer of £550, £550p or £5.5 as evidence of appropriate method.*

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

Up to 2m

[2]

**Q20.**

Award **TWO** marks for only two correct boxes ticked, as shown:

There are more cheetahs than jaguars.

The total number of lions and tigers is 10

One-quarter of the big cats are cheetahs.

There are more than 5 jaguars.

Award **ONE** mark for:

- only one correct box ticked and no incorrect boxes ticked

**OR**

- two correct boxes ticked and one incorrect box ticked.

*Accept alternative unambiguous positive indications, e.g. Y.*

Up to 2 marks

[2]

### Q21.

Award **TWO** marks for the correct answer of 1,609

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

- $5,895 + 1,344 = 7,239$   
 $8,848 - 7,239$

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

Up to 2m

[2]

### Q22.

(a) 7

1

**Do not accept** -7 or 7-

(b) -2

1

**Do not accept** 2-

[2]