

FOURTH FACTS ANSWERS

Aim: To find the mean of a set of numbers.

For each set of numbers calculate the mean.

1.	9, 7, 8, 8	8
2.	8, 7, 9, 8	8
3.	1, 2, 7, 6	4
4.	2, 3, 9, 2	4
5.	4, 9, 4, 7	6
6.	5, 5, 8, 6	6
7.	7, 1, 10, 2	5
8.	3, 1, 8, 8	5
9.	9, 7, 6, 2, 3	5.4
10.	7, 10, 6, 5, 7	7
11.	13, 8, 9, 8, 2	8
12.	2, 8, 12, 4	6.5
13.	15, 12, 8, 10	11.25
14.	8, 8, 15, 1	8
15.	12, 4, 7, 3	6.5

16.	10, 11, 9, 2	8
17.	9, 9, 6, 2	6.5
18.	9, 8, 8, 1, 7	6.6
19.	12, 13, 2, 2, 6	7
20.	3, 2, 14, 9, 6	6.8
21.	8, 9, 16, 15	12
22.	8, 16, 19, 15	14.5
23.	4, 11, 13, 15	10.75
24.	17, 10, 16, 6	12.25
25.	14, 15, 18, 5	13
26.	9, 5, 13, 3	7.5
27.	20, 10, 17, 20	16.75
28.	13, 13, 5, 4, 12	9.4
29.	3, 10, 4, 9, 18	8.8
30.	19, 18, 3, 5, 14	11.8

For each set of numbers calculate the value of the missing number using the given mean.

31.	14	18	5	11	with a mean of 12	
32.	2	20	7	20	with a mean of 12.25	
33.	5	7	5	6	7	with a mean of 6
34.	4	6	1	2	1	with a mean of 2.8
35.	1	17	12	21	6	with a mean of 11.4



Cycle Ride Line Graphs **Answers**

Question	Answer
1.	How far had Megan cycled by 15:55?
	<i>2.2km</i>
2.	How many minutes did it take Megan to cycle 3.8km?
	<i>85 minutes</i>
3.	At what time did Rhys stop cycling to have his second rest?
	<i>16:20</i>
4.	At what time did Megan stop cycling to have her first rest?
	<i>15:40</i>
5.	How much further had Rhys cycled than Megan at 16:10?
	<i>0.4km</i>
6.	Did Rhys increase or decrease his lead from 16:10 to 16:20? By how much?
	<i>He increased his lead by 0.2km, to 0.6km.</i>
7.	How many minutes did it take Megan to cycle from 3km to 4km?
	<i>20 minutes</i>
8.	For how many km was Megan in the lead?
	<i>0.2km</i>

Mark schemes

Q1.

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]

Q2.

(a) 7

1

Do not accept -7 or 7-

(b) -2

1

Do not accept 2-

[2]

Q3.

5

Do not accept 300 (minutes).

[1]

Q4.

(a) Paris

1

(b) 3

Do not accept -3.

1

[2]

Q5.

(a) 3

Do not accept a list of names.

1

(b) Chen

Accept unambiguous abbreviations or recognisable misspellings.

Accept 9

1
U1

[2]

Q6.

(a) £3.00

1

(b) 6

1

(c) 10:20 am

The answer is a specific time.

1

[3]

Q7.

Describes the key features of the information

2 marks are available, one from each of the categories

A and B below:

Category A

States that the rate the mass of the dog increases slows as it gets older, eg

- They get heavier in their first few months but as they get older their weight doesn't go up as much

1

Category B

Makes an observation that links the information in the bar chart to the adult mass, eg

- It reaches adult size after the first year
- A dog is about half grown when it is 4 months old

1

*Accept minimally acceptable explanation
eg, for category A*

- Grows quickly then more slowly
- After a few months the amount it increases by gets smaller [accept any value from 4 – 8 months inclusive within this type of response]
- They start by gaining about 5 kg per month but this gets less and less

eg, for category B

- Doesn't get any fatter after it is a year old
- They stop at 12 months
- At 6 months, it's more than half-sized

eg, for both categories (ie 2 marks)

- It grows quickly then slowly until 12 months when it stops

! Values given

As this question is assessing understanding of information presented graphically, condone incorrect numbers for category A, but do not accept for category B

eg, for category A, accept

- They increase by about 10 kg per month but not as much as they get older

eg, for category B, do not accept

- A dog is about half grown after half a year

Do not accept incomplete explanation

eg, for category A

- Dogs get heavier as they get older [doesn't say how rate of change alters]

eg, for category B

- A German Shepherd stops growing when it reaches 35 kg [no link to 12 months]

- It grows quickly then slowly until 12 months [gains category A mark but no link to full weight being reached for category B]

[2]

Q8.

Diagram completed as shown:

	multiples of 9	not multiples of 9
even	72 54	56 84
not even	63 45	49 75

Accept recognisable misspellings.

Accept 'odd' for 'not even'.

Accept alternative unambiguous indications, eg lines drawn from the labels to the appropriate parts of the diagram.

[1]

Q9.

(a) £50

1

(b) £275

1

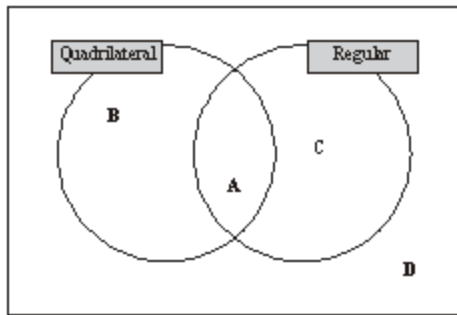
(c) £900

1

[3]

Q10.

Award **TWO** marks for the three letters written in the correct regions as shown:



If the answer is incorrect, award **ONE** mark for two letters written in the correct regions.

Do not accept letters written in more than one region.

Accept alternative unambiguous indications, eg lines drawn from the shapes to the appropriate regions of the diagram.

Accept unambiguous shapes drawn in the appropriate regions of the diagram.

Up to 2 (U1)

[2]