1 Alexa has five cards.
Each card has a number on it.

The table gives information about the numbers on the five cards.

Total	Median	Mode	Range
45	8	5	10

Using the information in the table, complete each card by writing its number on it.

Median = 8 (means two number smaller and two number larger than 8)

Mode = 5 (means appear the most. Since 8 is median, there are two 5s)

Range = 10. (since 5 is the smallest number, largest number is 15)

Total = 45. The remaining card is 45 - 5 - 5 - 8 - 15 = 12

5 5 8 12 15 ③

(Total for Question 1 is 3 marks)

2 Alison buys 2 boxes of strawberries, box **A** and box **B**.

Box **A** contains 15 strawberries.
The strawberries in box **A** have a mean weight of 24 grams.

Box **B** contains 25 strawberries.
The strawberries in box **B** have a mean weight of 18 grams.

Alison puts all 40 strawberries into a bowl.
Work out the mean weight of the 40 strawberries.

$$\text{mean} = \frac{\text{total weight}}{\text{no. of strawberry}}$$

Calculating total weight of box A :

$$24 \times 15 = 360 \text{ g}$$

Calculating total weight of box B :

$$18 \times 25 = 450 \text{ g} \quad ①$$

Calculating total weight of all strawberries :

$$360 + 450 = 810 \text{ g} \quad ①$$

Mean weight of 40 strawberries :

$$\frac{810 \text{ g}}{40} = 20.25 \text{ g} \quad ①$$

.... 20.25 grams

(Total for Question 2 is 3 marks)

3 Here is a list of six numbers written in order of size.

$$4 \qquad 7 \qquad x \qquad 10 \qquad y \qquad y$$
$$8$$

The numbers have

a median of 9
a mean of 11

Find the value of x and the value of y.

$$\text{median} = \frac{10 + x}{2} = 9 \quad ①$$

$$10 + x = 18$$
$$\therefore x = 8 \qquad) \; -10$$

$$\text{mean} = 11 = \frac{4 + 7 + 8 + 10 + 2y}{6} \quad ①$$

$$66 = 29 + 2y \qquad \times 6$$

$$66 - 29 = 2y \qquad) \; -2y$$
$$①$$

$$2y = 37$$
$$\therefore y = 18.5 \qquad) \div 2$$

$$x = \underline{\quad 8 \quad ①}$$

$$y = \underline{\quad 18.5 \quad}$$

(Total for Question 3 is 4 marks)

4 Paula asks 16 members of her class the number of pets they each have.
Here are her results.

| 1 | 2 | 2 | 4 | 0 | 1 | 2 | 1 |

| 3 | 3 | 4 | 1 | 1 | 0 | 3 | 2 |

(a) Complete the frequency table for her results.

Number of pets	Tally	Frequency
0	II	**2**
1	⊮	**5**
2	IIII	**4**
3	III	**3**
4	II	**2**

②

(2)

(b) Write down the mode for the number of pets.

most frequency

I ①

(1)

(c) Work out the range for the number of pets.

highest no. of pets - lowest no. of pets

5 - 1 = 4

4 ①

(1)

(Total for Question 4 is 4 marks)

5 The table shows information about the lengths of time, in minutes, 120 customers spent in a supermarket.

Length of time (L minutes)	Frequency
$20 < L \leqslant 30$	6
$30 < L \leqslant 40$	26
$40 < L \leqslant 50$	31
$50 < L \leqslant 60$	40
$60 < L \leqslant 70$	17

(a) Write down the modal class.

↘ class with highest frequency

$50 < L \leqslant 60$ ①

....

(1)

(b) Work out an estimate for the mean length of time spent by the 120 customers in the supermarket.

$$\text{mean} = \frac{\text{midpoint} \times \text{frequency}}{\text{total frequency}}$$

$$\text{mean} = \frac{(25 \times 6) + (35 \times 26) + (45 \times 31) + (55 \times 40) + (65 \times 17)}{120} ①$$

$$= \frac{150 + 910 + 1395 + 2200 + 1105}{120} ①$$

$$= \frac{5760}{120 ①} = 48 ①$$

48

....minutes

(4)

(Total for Question 5 is 5 marks)

6   Here is a list of 7 temperatures.

$$4\,°C \qquad -6\,°C \qquad 4\,°C \qquad 0\,°C \qquad -1\,°C \qquad -7\,°C \qquad -5\,°C$$

(b) For the 7 temperatures in the list,

(i) write down the mode,

Mode : highest frequency

4°C appears twice, so that is
the mode

4°C ①

.... °C

(1)

(ii) find the median.

List all numbers from lowest to highest

−7°C , −6°C , −5°C , −1°C , 0°C , 4°C , 4°C ①
                              ↑

middle value

−1 ①

.... °C

(2)

(Total for Question 6 is 3 marks)

7 Here are four different numbers written in order of size.

$$3 \qquad 6 \qquad m \qquad n$$

The range of the four numbers is 13
The median of the four numbers is 8.5

Find the value of m and the value of n.

median $= \dfrac{6+m}{2} = 8.5$

$6+m = 17$

$m = 11$

range $= n - 3 = 13$

$n = 16$

$m = \underline{\quad 11 \quad}$ ①

$n = \underline{\quad 16 \quad}$ ①

(Total for Question 7 is 2 marks)

8 The table shows information about the weights, in kilograms, of 40 babies.

Weight (w kg)	Frequency
$2 < w \leqslant 3$	12
$3 < w \leqslant 4$	16
$4 < w \leqslant 5$	9
$5 < w \leqslant 6$	2
$6 < w \leqslant 7$	1

(a) Write down the modal class.

modal class : class with highest frequency

$3 < w \leqslant 4$ ①

....

(1)

(b) Work out an estimate for the mean weight of the 40 babies.

Estimated Total weight $= (12 \times 2.5) + (16 \times 3.5) + (9 \times 4.5) + (2 \times 5.5) + (1 \times 6.5)$ ①

$= 30 + 56 + 40.5 + 11 + 6.5$ ①

$= 144$

Mean $= \dfrac{144}{40}$ ① $= 3.6$ kg ①

3.6

.... kg

(4)

One of the 40 babies is going to be chosen at random.

(c) Find the probability that this baby has a weight of more than 5 kg.

Baby weight more than 5 kg $= \dfrac{2}{40} + \dfrac{1}{40}$ ①

$= \dfrac{3}{40}$ ①

$\dfrac{3}{40}$

....

(2)

(Total for Question 8 is 7 marks)

9 The table shows information about the number of pieces of homework each student in Year 11 received last week.

Number of pieces of homework	Frequency
3	4
4	8
5	10
6	12
7	4

(a) Work out the range of the number of pieces of homework.

range = difference between highest and lowest

$$7 - 3 = 4$$

4

(2)

(b) Write down the mode of the number of pieces of homework.

mode = class with highest frequency

6

(1)

(c) Work out the mean number of pieces of homework.
Give your answer correct to one decimal place.

$$mean = \frac{(4 \times 3) + (8 \times 4) + (10 \times 5) + (12 \times 6) + (4 \times 7)}{4 + 8 + 10 + 12 + 4}$$

$$= \frac{12 + 32 + 50 + 72 + 28}{38}$$

$$= \frac{194}{38}$$

$$= 5.1$$

5.1

(3)

(Total for Question 9 is 6 marks)

10 Cate asked the 60 members of a leisure centre how many times they had each visited the leisure centre last week.

The table gives information about her results.

Number of visits	Frequency
0	4
1	12
2	17
3	20
4	7

(a) Write down the mode of the number of visits.

mode = class with the highest frequency

.... 3 ①

(1)

(Total for Question 10 is 1 marks)

11 Given that $a < b < c$

the four whole numbers a, a, b and c have

a mode of 7
a median of 8.5
a mean of 9

Work out the value of a, the value of b and the value of c.

mode $= a = 7$ ①

median $= \dfrac{a+b}{2} = 8.5$

$\dfrac{7+b}{2} = 8.5$

$7+b = 17$

$b = 10$ ①

mean $= \dfrac{a+a+b+c}{4} = 9$ ①

$7+7+10+c = 36$

$c = 36 - 24 = 12$ ①

$a = \underline{\qquad 7 \qquad}$

$b = \underline{\qquad 10 \qquad}$

$c = \underline{\qquad 12 \qquad}$

(Total for Question 11 is 4 marks)

12 The table shows the temperature recorded in Amsterdam at 6 am on each of five days.

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Temperature (°C)	−5	−1	4	3	−6

(a) What is the range of the temperatures in the table?

range = highest − lowest

$4 - (-6) = 10$ ①
①

10 ....°C

(2)

(b) What is the median of the temperatures in the table?

Arrange in order:

$-6, -5, Ⓘ-1, 3, 4$ ①

↑ median

−1 ① ....°C

(2)

(c) What percentage of the temperatures in the table are lower than 0 °C?

Temperatures lower than 0°c : $-5, -1, -6$

3 out of 5 : $\frac{3}{5} \times 100\%$ ①

$= 60\%$ ①

60 ....%

(2)

On Saturday of the same week, the temperature recorded in Amsterdam at 6 am was 8 °C higher than the temperature recorded at 6 am on Friday.

(d) What was the temperature recorded in Amsterdam at 6 am on Saturday?

$-6 + 8 = 2$
① ①

2 ....°C

(2)

(Total for Question 12 is 8 marks)

13 A mathematics teacher at a school asked a group of students how far, in kilometres, each student had travelled to get to school that day.

The table gives information about their answers.

Distance travelled (d km)	Number of students
$0 < d \leqslant 2$	x
$2 < d \leqslant 4$	11
$4 < d \leqslant 6$	8
$6 < d \leqslant 8$	6
$8 < d \leqslant 10$	5

The teacher calculated that an estimate for the mean distance travelled by the whole group of students was 4.25 km.

Work out the value of x.
Show your working clearly.

$$\text{Estimated mean} = \frac{(x \times 1) + (11 \times 3) + (8 \times 5) + (6 \times 7) + (5 \times 9)}{x + 11 + 8 + 6 + 5} = 4.25 \quad ①$$

$$= \frac{x + 33 + 40 + 42 + 45}{x + 30} = 4.25$$

$$= \quad 160 + x \quad = 4.25(30 + x) \quad ①$$

$$160 + x = 127.5 + 4.25x$$

$$160 - 127.5 = 4.25x - x$$

$$32.5 \quad = 3.25x \quad ①$$

$$x = \frac{32.5}{3.25}$$

$$= 10 \quad ①$$

$x =$ ......**10**......

(Total for Question 13 is 4 marks)

14 The table gives information about the speeds, in kilometres per hour, of 80 motorbikes as each pass under a bridge.

Speed (s kilometres per hour)	Frequency
$40 < s \leqslant 50$	10
$50 < s \leqslant 60$	16
$60 < s \leqslant 70$	19
$70 < s \leqslant 80$	23
$80 < s \leqslant 90$	12

(a) Write down the modal class.

$70 < s \leqslant 80$ ①

..............$70 < s \leqslant 80$..............

(1)

(b) Work out an estimate for the mean speed of the motorbikes as they pass under the bridge. Give your answer correct to 3 significant figures.

$$= \frac{10(45) + 16(55) + 19(65) + 23(75) + 12(85)}{10 + 16 + 19 + 23 + 12} \ ②$$

$$= \frac{5310}{80} \ ①$$

$$= 66.375$$

$$= 66.4 \ (3sf) \ ①$$

..............66.4.............. kilometres per hour

(4)

(Total for Question 14 is 5 marks)

15 Ava writes down five whole numbers.

For these five numbers

the median is 7 — *7 should be in the middle*

the mode is 8 — *8 should appear twice*

the range is 5 — *smallest number can be obtained by 8-5*

Find a possible value for each of the five numbers that Ava writes down.

8 - 5 = 3

3, 5, 7, 8, 8 ③

3, 5, 7, 8, 8

(Total for Question 15 is 3 marks)

16 There are 5 cocoa pods in a bag.
The mean weight of the 5 cocoa pods is 398 grams.

A sixth cocoa pod is put into the bag.
The mean weight of the 6 cocoa pods is 401 grams.

Work out the weight of the sixth cocoa pod that is put into the bag.

weight of 5 cocoa pods = $398 \times 5 = 1990$ ①

weight of 6 cocoa pods = $401 \times 6 = 2406$

weight of sixth cocoa pod = $2406 - 1990$ ①

$= 416$ ①

416 .... grams

(Total for Question 16 is 3 marks)

17 Here are five cards.

Each card has a number written on it.

15	7	−2	23	x

The mean of the five numbers is 12

Work out the value of x

$$\text{mean} = \frac{15 + 7 + (-2) + (23) + x}{5} = 12 \quad \text{①}$$

$$43 + x = 12(5) \quad \text{①}$$

$$x = 60 - 43$$

$$= 17 \quad \text{①}$$

$x =$ ....17........

(Total for Question 17 is 3 marks)

18 The table shows information about the number of mobile phones owned by each of 40 families.

Number of mobile phones	Frequency
0	1
1	5
2	12
3	9
4	11
5	2

For the information in the table,

(a) write down the mode,

mode = class with highest frequency

2 ①

(1)

(b) work out the mean.

$$mean = \frac{(0\times1)+(1\times5)+(2\times12)+(3\times9)+(4\times11)+(5\times2)}{1+5+12+9+11+2} \quad ①$$

$$= \frac{5+24+27+44+10}{40}$$

$$= \frac{110}{40} \quad ①$$

$$= 2.75 \quad ①$$

2.75

(3)

(Total for Question 18 is 4 marks)

19 Alberto, Bill, Candela and Diana are four friends.

Here is some information about the height of each of these friends.

Alberto's height is 158 cm.
Bill's height is 175 cm.
Candela's height is greater than Diana's height.

The median height of these four friends is 160 cm.
The range of the heights of these four friends is 21 cm.

Work out Candela's height and Diana's height.

154   158   162   175
y A x B

Since median = 160 cm,

$$\frac{158 + x}{2} = 160$$

$$x = 162 \text{ cm} \quad ①$$

Since Candela's height is higher than Diana's,

x = Candela's height = 162 cm

Since range = 21 cm,

$175 - 21 = y = 154$ cm = Diana's height   ①

Candela .... 162 ① .... cm

Diana .... 154 .... cm

(Total for Question 19 is 3 marks)

20 The table gives information about the number of gold stars won by each of 25 students in class 7T last week.

Number of gold stars	Number of students
0	6
1	5
2	4
3	7
4	3

(a) Work out the mean number of gold stars won.

$$\text{mean} = \frac{(0 \times 6) + (1 \times 5) + (2 \times 4) + (3 \times 7) + (4 \times 3)}{25} \quad ①$$

$$= \frac{0 + 5 + 8 + 21 + 12}{25}$$

$$= \frac{46}{25} \quad ①$$

$$= 1.84 \quad ①$$

...........1.84...........

(3)

(Total for Question 20 is 3 marks)

21 Here are some integers where $a < b < c < d$

$$a \qquad b \qquad c \qquad d \qquad d \qquad d$$

The mode of the integers is 9
The median of the integers is 8
The range of the integers is 4

Work out the value of a, the value of b, the value of c and the value of d

mode : $d = 9$ ①

median : $8 = \dfrac{c + 9}{2}$

$c = 7$ ①

range : $4 = 9 - a$

$a = 5$

$b = 6$

①

$a = 5$

$b = 6$

$c = 7$

$d = 9$

(Total for Question 21 is 3 marks)

22 The table shows information about the number of eggs laid by each of 36 hens in one week.

Number of eggs	Frequency
0	5
1	5
2	3
3	10
4	7
5	6

Work out the mean number of eggs laid.

$$\text{mean} = \frac{(0\times5)+(1\times5)+(2\times3)+(3\times10)+(4\times7)+(5\times6)}{36} \quad ①$$

$$= \frac{99}{36} \quad ①$$

$$= 2.75 \quad ①$$

2.75
....

(Total for Question 22 is 3 marks)

23 Yusuf sat 8 examinations.

Here are his marks for 5 of the examinations.

64   68   72   75   77   80   **80**

For his results in all 8 examinations

    the mode of his marks is 80
    the median of his marks is 74
    the range of his marks is 16

Find Yusuf's marks for each of the other 3 examinations.

$a = 80$ ①

$b = $ range, $16 = 80 - b$

$$b = 64$$ ①

median, $74 = \dfrac{75 + c}{2}$

$$c = 73$$ ①

64
....
① 73
....
80
....

(Total for Question 23 is 4 marks)

24 Here are the salaries, in thousands of dollars, of seven people.

<center>21   28   29   32   34   34   39</center>

(a) Find the mode of the salaries.

34 ①

.... thousand dollars

(1)

(b) Find the range of the salaries.

39 - 21 = 18

18 ①

.... thousand dollars

(1)

(Total for Question 24 is 2 marks)

25 A scientist is investigating the weight of 50 tigers.

Here is some information about these tigers.

	Type of tiger	
	Siberian	**Bengal**
Number of tigers	22	28
Mean weight of tigers (kg)	260	185

The mean weight of all 50 tigers is 218 kg

Work out the mean weight of the Bengal tigers.

Siberian : 260 × 22 = 5720 ①

All tigers : 218 × 50 = 16 900

mean of Bengal : $\dfrac{10\,900 - 5720}{28}$ ① $= \dfrac{5180}{28}$

$= 185$ ①

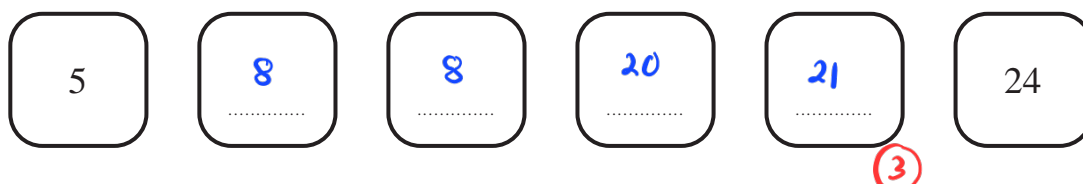185 .... kg

(Total for Question 25 is 3 marks)

26 Jenny has six cards.

Each card has a whole number written on it so that

the smallest number is 5
the largest number is 24
the median of the six numbers is 14
the mode of the six numbers is 8

Jenny arranges her cards so that the numbers are in order of size.

5	8	8	20	21	24
	....	....	....	....	

③

(a) For the remaining four cards, write on each dotted line a number that could be on the card.

Median, 14 = $\frac{8 + m}{2}$

m = 20

(3)

A basketball team plays 6 games.
After playing 5 games, the team has a mean score of 21 points per game.
After playing 6 games, the team has a mean score of 23 points per game.

(b) Work out the number of points the team scored in its 6th game.

5 × 21 = 105

6 × 23 = 138 ①

138 − 105 = 33 ①
①

33

(3)

(Total for Question 26 is 6 marks)

27 The frequency table gives information about the number of points scored by a player.

Number of points	Frequency
0	13
1	17
2	8
3	x
4	11

The mean number of points scored is 2

Work out the value of x

$$\text{mean}, 2 = \frac{13(0) + 17(1) + 8(2) + 3x + 11(4)}{13 + 17 + 8 + x + 11} \quad ①$$

$$2(13) + 2(17) + 2(8) + 2x + 2(11) = 17 + 16 + 3x + 44 \quad ①$$

$$26 + 34 + 16 + 2x + 22 = 77 + 3x \quad ①$$

$$98 - 77 = 3x - 2x$$

$$x = 21 \quad ①$$

$x = $ ....**21**............................

(Total for Question 27 is 4 marks)

28 The table shows information about the frame size, in cm, of 60 bicycles sold in a shop.

Frame size (S cm)	Frequency
$30 < S \leqslant 36$	4
$36 < S \leqslant 42$	14
$42 < S \leqslant 48$	18
$48 < S \leqslant 54$	19
$54 < S \leqslant 60$	5

(a) Write down the modal class.

$48 < S \leqslant 54$ ①

(1)

(b) Work out an estimate for the mean frame size.

$$\frac{33 \times 4 + 39 \times 14 + 45 \times 18 + 51 \times 19 + 57 \times 5}{60} \quad ①$$

$$= \frac{132 + 546 + 810 + 969 + 285}{60} \quad ①$$

$$= \frac{2742}{60} \quad ①$$

$$= 45.7 \quad ①$$

45.7 cm

(4)

(Total for Question 28 is 5 marks)

29 Here is a list of six numbers written in order of size.

$$\begin{array}{cccccc} \mathbf{3} & & \mathbf{6} & \mathbf{10} & & \\ x & 5 & y & z & 10 & 12 \end{array}$$

The numbers have

a range of 9
a median of 8
a mode of 10

Find the value of x, the value of y and the value of z

mode = 10 , hence z = 10

median 8 , $\dfrac{y + 10}{2}$ = 8

y = 6

range = 9 , 12 - 9 = 3

x = 3

$x = $ ....**3**............ ③

$y = $ ....**6**............

$z = $ ....**10**............

(Total for Question 29 is 3 marks)

30 60 students sat a Mathematics exam.

The mean mark for the 32 students in Class A was 55
The mean mark for the 28 students in Class B was 52

Find the mean mark for all 60 students.

$$55 \times 32 = 1760 \quad ①$$

$$52 \times 28 = 1456$$

$$\frac{1760 + 1456}{60} \quad ① \quad = \quad \frac{3216}{60}$$

$$= 53 \cdot 6 \quad ①$$

53·6
....

(Total for Question 30 is 3 marks)

31 80 students entered a dancing competition.

The table gives information about the length of time, in minutes, for which each student spent dancing.

Time (m)	Frequency
$0 < m \leqslant 12$	11
$12 < m \leqslant 24$	25
$24 < m \leqslant 36$	23
$36 < m \leqslant 48$	15
$48 < m \leqslant 60$	6

Work out an estimate for the mean length of time the students spent dancing.

$$\text{Mean} : \frac{(6 \times 11) + (18 \times 25) + (30 \times 23) + (42 \times 15) + (54 \times 6)}{80} \quad ①$$

$$\frac{66 + 450 + 690 + 630 + 324}{80} \quad ①$$

$$= \frac{2160}{80} \quad ①$$

$$= 27 \quad ①$$

.................**27**................. minutes

(Total for Question 31 is 4 marks)

32 The frequency table shows information about the number of cookies made by each of the 21 people in a cookery class.

Number of cookies made	Frequency	
10	1	1
11	7	8
12	2	10
13	5	15
14	4	19
15	2	21

(a) Write down the mode of the number of cookies made.

11 ①

.... (1)

(b) Find the median number of cookies made.

$$\frac{21}{2} = 10.5$$
$$= 11 \text{ th cookies}$$
①

13 ①

.... (2)

(c) Find the total number of cookies made by the 21 people in the cookery class.

$$10 \times 1 + 7 \times 11 + 2 \times 12 + 5 \times 13 + 4 \times 14 + 2 \times 15$$
$$= 10 + 77 + 24 + 65 + 56 + 30 \quad ①$$
$$= 262 \quad ①$$

262

.... (2)

(Total for Question 32 is 5 marks)

33 The table shows how many cousins each of 30 students in Class **A** has.

Number of cousins	Frequency
0	3
1	7
2	6
3	11
4	1
5	2

(a) Work out the range of the number of cousins.

$5 - 0 = 5$

5 ①

(1)

(b) Write down the mode of the number of cousins.

3 ①

(1)

(c) Work out the mean of the number of cousins.

$$\text{mean} = \frac{(0 \times 3) + (1 \times 7) + (2 \times 6) + (3 \times 11) + (4 \times 1) + (5 \times 2)}{30}$$ ①

$$= \frac{7 + 12 + 33 + 4 + 10}{30}$$

$$= \frac{66}{30} = 2 \cdot 2$$ ① ①

2.2

(3)

(Total for Question 33 is 5 marks)

34 Gemara works as a taxi driver.
Last week, he recorded the following information about the distances he drove.

For the 5 days from Monday to Friday, the mean number of kilometres he drove was 104
For the 7 days from Monday to Sunday, the mean number of kilometres he drove was 127

On Saturday, Gemara drove 132 kilometres.

Work out the number of kilometres he drove on Sunday.

Total distance :

Monday to Friday : 5 × 104 = 520 km ①

Monday to Sunday = 7 × 127 = 889 km

Saturday and Sunday = 889 - 520 = 369 km ①

Sunday = 369 - 132 = 237 km ①

237 .... kilometres

(Total for Question 34 is 3 marks)

35 Pam plays netball for her school team.

Here are the numbers of goals she scored in the last 8 games.
The numbers of goals are written in order of size.

<div align="center">1   1   2   2   3   6   <i>x</i>   14</div>

(a) Find the range of the number of goals Pam scored.

$$14 - 1 = 13 \quad \textcircled{1}$$

13
....
(1)

(b) Find the median number of goals Pam scored.

$$\text{Median} = \frac{2+3}{2} = 2.5 \quad \textcircled{1}$$

2.5
....
(1)

The mean number of goals Pam scored in the 8 games is 5

(c) Work out the value of x

$$\text{Total goals scored} = 8 \times 5 = 40 \quad \textcircled{1}$$

$$x = 40 - 1 - 1 - 2 - 2 - 3 - 6 - 14 \quad \textcircled{1}$$

$$= 40 - 29$$

$$= 11 \quad \textcircled{1}$$

$x = $ 11
....
(3)

(Total for Question 35 is 5 marks)

36 Team **A** and Team **B** take part in a quiz league.

After 11 rounds, Team **A** has a mean score per round of 17
After   9 rounds, Team **B** has a mean score per round of 18

Both teams take part in a further round.
After this round, both teams have a mean score per round of 18.5

In the further round, Team **A** scored more points than Team **B**.

How many more?

Total score (Team A) : $17 \times 11 = 187$
Total score (Team B) : $18 \times 9 = 162$ ①

Team A : $\dfrac{187 + x}{12} = 18.5$

$187 + x = 18.5 \times 12$

$x = 222 - 187 = 35$ ①

Team B : $\dfrac{162 + y}{10} = 18.5$

$162 + y = 185$

$y = 185 - 162 = 23$

$35 - 23 = 12$ ①

①

12

(Total for Question 36 is 4 marks)