1 The table shows information about the number of points scored in a game.

| Points | Frequency |
| :---: | :---: |
| 0 | 9 |
| 1 | 11 |
| 2 | 18 |
| 3 | 7 |
| 4 | 4 |
| 5 | 1 |

Work out the mean number of points per game.
(Total for question $\mathbf{1}$ is $\mathbf{3}$ marks)
2 The table shows information about the number of goals scored in a game by a football team.

| Points | Frequency |
| :---: | :---: |
| 0 | 10 |
| 1 | 12 |
| 2 | $x$ |
| 3 | 7 |
| 4 or more | 0 |

The team scored a total of 55 goals.
Find the value of $x$.

The table shows information about the number of goals a team scored in 38 games.

| Points | Frequency |
| :---: | :---: |
| 0 | 7 |
| 1 | 14 |
| 2 | 11 |
| 3 | 6 |
| 4 or more | 0 |

(a) Find the median number of goals scored.
(b) Write down the mode
(c) Work out the total number of goals the team scored in all 38 games.
(Total for question $\mathbf{3}$ is $\mathbf{4}$ marks)
4 Adam is measuring the heights in cm of his tomato plants.

| Height (cm) | Frequency |
| :---: | :---: |
| $140<\mathrm{h} \leqslant 150$ | 7 |
| $150<\mathrm{h} \leqslant 160$ | 10 |
| $160<\mathrm{h} \leqslant 170$ | 15 |
| $170<\mathrm{h} \leqslant 180$ | 19 |
| $180<\mathrm{h} \leqslant 200$ | 9 |

(a) Estimate the mean height.

Give your answer correct to 1 decimal place.
(b) Explain why your answer to part (a) is an estimate.
(Total for question 4 is $\mathbf{4}$ marks)

5 The table below gives information about the time taken for 20 people to run 5 km .

| Time (minutes) | Frequency |
| :---: | :---: |
| $15<\mathrm{t} \leqslant 20$ | 3 |
| $20<\mathrm{t} \leqslant 25$ | 6 |
| $25<\mathrm{t} \leqslant 30$ | 7 |
| $30<\mathrm{t} \leqslant 40$ | 4 |

(a) Find the class interval that contains the median.
(b) Work out an estimate for the mean time.
(Total for question 5 is $\mathbf{4}$ marks)
6 Michael recorded the maximum temperature every day in September. The table shows information about his results.

| Temperature $\left({ }^{\circ} \mathbf{C}\right)$ | Frequency |
| :---: | :---: |
| $14<\mathrm{t} \leqslant 18$ | 4 |
| $18<\mathrm{t} \leqslant 20$ | 10 |
| $20<\mathrm{t} \leqslant 22$ | 8 |
| $22<\mathrm{t} \leqslant 24$ | 5 |
| $24<\mathrm{t} \leqslant 28$ | 3 |

Calculate an estimate for the mean maximum temperature.
(Total for question 6 is $\mathbf{3}$ marks)

8 The bar chart shows how many hours of homework 30 students did last week.


Calculate an estimate for the mean number of hours of homework.
(Total for question 8 is $\mathbf{3}$ marks)

