## Averages from Tables - www.m4ths.com

(1) The table below shows the number of goals scored by a hockey team in each game over one season.

| Goals per game | Frequency | F×G |
| :--- | :--- | :--- |
| 0 | 3 |  |
| 1 | 5 |  |
| 2 | 4 |  |
| 3 | 2 |  |
| 4 | 1 |  |
| 5 | 2 |  |

(a) Write down the modal number of goals scored per game.
(b) Find the median number of goals scored per game.
(c) Find the mean number of goals scored per game.
(d) Find the range of the number of goals scored per game.
(e) State whether the data is discrete or continuous.
(2) The table below shows the time is takes students to get to their school in the morning.

| Time | Frequency | F XM |
| :--- | :--- | :--- |
| $0 \leq \mathrm{t}<4$ | 10 |  |
| $4 \leq \mathrm{t}<7$ | 12 |  |
| $7 \leq \mathrm{t}<11$ | 8 |  |
| $11 \leq \mathrm{t}<15$ | 15 |  |

(a) Explain why this is grouped data.
(b) State whether time is discrete or continuous giving a reason for your answer.
(c) Which is the modal category?
(c) Which category includes the median time it takes a student to get to school?
(d) Find an estimated mean time it takes the students to get to school.
(e) Explain why you can't find the range of the time is takes students to get to school.
(3) The table below shows the age of some people at a sports club.

| Age | Frequency |
| :---: | :---: |
| $10 \leq \mathrm{a}<20$ | 20 |
| $20 \leq \mathrm{a}<30$ | 10 |
| $30 \leq \mathrm{a}<50$ | 12 |
| $50 \leq \mathrm{a}<70$ | 16 |

(a) Can you tell the age of the youngest member of the sports club from the table? If not, why not?
(b) State which is the modal age group.
(c) Find which age group the median age lies in.
(d) Find an estimated mean age for the members.
(e) Why is this mean an estimate?
(f) Fred says the age range of the members of the club is 58 . Could he be correct? You must explain your answer.
(4) The table below shows how many students attending the lunchtime Peacemallet club each week at a school.

| \# of students | Frequency |
| :--- | :--- |
| 0 | 13 |
| 1 | 7 |
| 2 | 8 |
| 3 | 5 |
| 4 | 2 |
| 5 | 2 |
| 6 | 0 |
| 7 | 1 |

(a) State how many weeks the club run for.
(b) What was the median number of students attending the club each week?
(c) Find the mean number of students attending the club each week. Is this an actual mean or estimated mean?
(d) What was the modal number of students attending the club each week?
(e) What was the range of the number of students attending the club each week?

## Averages from Tables - www.m4ths.com

(1) The table below shows the number of goals scored by a hockey team in each game over one season.

| Goals per game | Frequency | F X G |
| :--- | :--- | :--- |
| 0 | 3 |  |
| 1 | 5 |  |
| 2 | 4 |  |
| 3 | 2 |  |
| 4 | 1 |  |
| 5 | 2 |  |

(a) Write down the modal number of goals scored per game.
(b) Find the median number of goals scored per game.
(c) Find the mean number of goals scored per game.
(d) Find the range of the number of goals scored per game.
(e) State whether the data is discrete or continuous.
(2) The table below shows the time is takes students to get to their school in the morning.

| Time | Frequency | F xM |
| :--- | :--- | :--- |
| $0 \leq \mathrm{t}<4$ | 10 |  |
| $4 \leq \mathrm{t}<7$ | 12 |  |
| $7 \leq \mathrm{t}<11$ | 8 |  |
| $11 \leq \mathrm{t}<15$ | 15 |  |

(a) Explain why this is grouped data.
(b) State whether time is discrete or continuous giving a reason
for your answer.
(c) Which is the modal category?
(c) Which category includes the median time it takes a student to get to school?
(d) Find an estimated mean time it takes the students to get to school.
(e) Explain why you can't find the range of the time is takes students to get to school.
(3) The table below shows the age of some people at a sports club.

| Age | Frequency |
| :---: | :---: |
| $10 \leq \mathrm{a}<20$ | 20 |
| $20 \leq \mathrm{a}<30$ | 10 |
| $30 \leq \mathrm{a}<50$ | 12 |
| $50 \leq \mathrm{a}<70$ | 16 |

(a) Can you tell the age of the youngest member of the sports club from the table? If not, why not?
(b) State which is the modal age group.
(c) Find which age group the median age lies in.
(d) Find an estimated mean age for the members.
(e) Why is this mean an estimate?
(f) Fred says the age range of the members of the club is 58 . Could he be correct? You must explain your answer.
(4) The table below shows how many students attending the lunchtime Peacemallet club each week at a school.

| \# of students | Frequency |
| :--- | :--- |
| 0 | 13 |
| 1 | 7 |
| 2 | 8 |
| 3 | 5 |
| 4 | 2 |
| 5 | 2 |
| 6 | 0 |
| 7 | 1 |

(a) State how many weeks the club run for.
(b) What was the median number of students attending the club each week?
(c) Find the mean number of students attending the club each week. Is this an actual mean or estimated mean?
(d) What was the modal number of students attending the club each week?
(e) What was the range of the number of students attending the club each week?

