

1 200 people recorded the time they spent on social media one day.

The table shows the results.

| Time, t (mins) | Frequency | Midpoint | |
|------------------|-------------|----------|--|
| $0 \leq t < 30$ | 24 | | |
| $30 \leq t < 50$ | 76 | | |
| $50 \leq t < 60$ | 52 | | |
| $60 \leq t < 90$ | 48 | | |
| | Total = 200 | | |

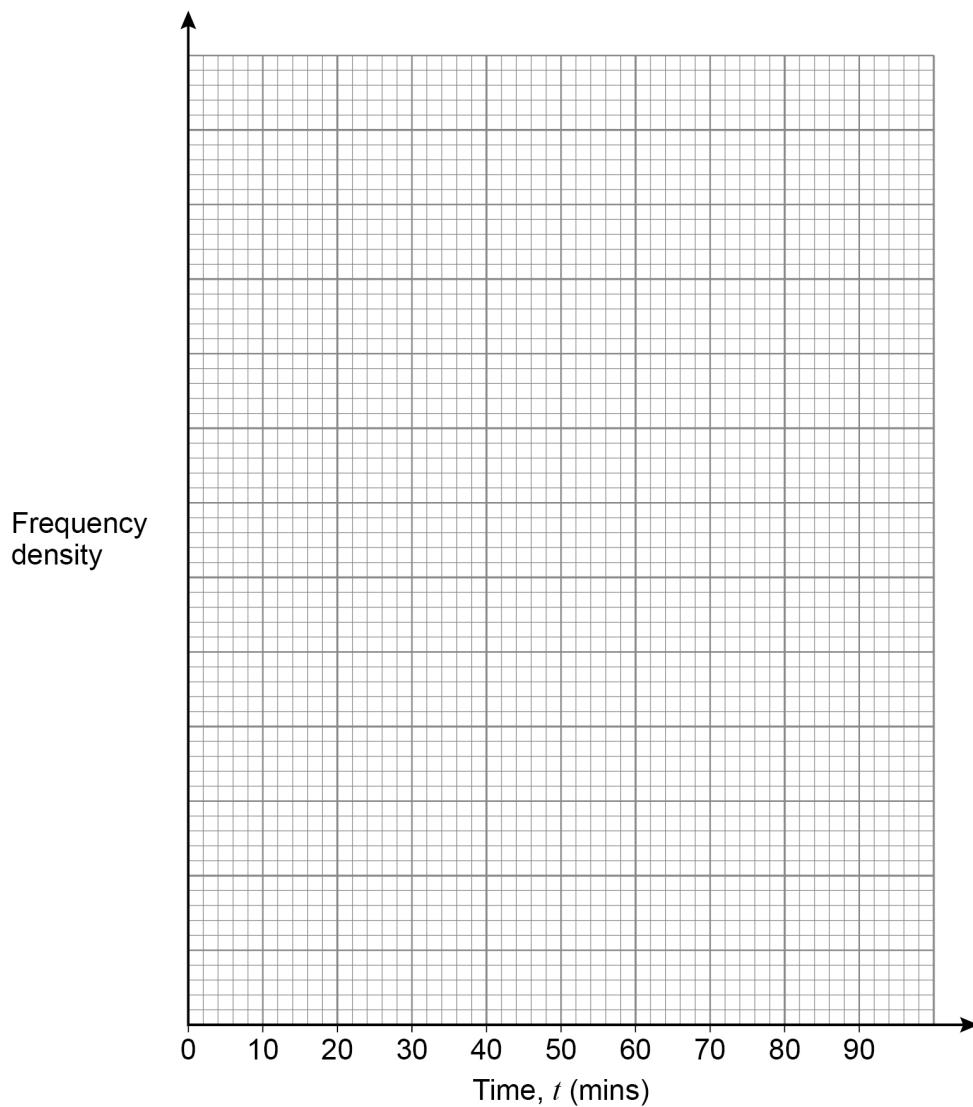
1 (a) Work out an estimate of the mean time.

[3 marks]

1 (b) Draw a histogram to represent the results.

[4 marks]

| Time, t (mins) | Frequency | Class width | |
|------------------|-----------|-------------|--|
| $0 \leq t < 30$ | 24 | | |
| $30 \leq t < 50$ | 76 | | |
| $50 \leq t < 60$ | 52 | | |
| $60 \leq t < 90$ | 48 | | |



2 Here is some information about the time spent on social media by 40 women and 40 men last week.

| Time spent, t (hours) | Number of women | Number of men |
|-------------------------|-----------------|---------------|
| $2 < t \leq 5$ | 12 | 10 |
| $5 < t \leq 8$ | 11 | 17 |
| $8 < t \leq 11$ | 14 | 9 |
| $11 < t \leq 14$ | 2 | 4 |
| $14 < t \leq 17$ | 1 | 0 |

Tick **one** box for each statement.

[3 marks]

| | Definitely true | Might be true | Cannot be true |
|---|--------------------------|--------------------------|--------------------------|
| Three of the women spent more than 11 hours on social media. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The range for the men is 15 hours. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The women have a higher median than the men. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |