

11 James is investigating the amount of time retired people spend each day using social media. He collects a sample by advertising in a local newspaper for people to complete an online survey.

(a) State

- the name of the sampling technique he is using,
- **one** disadvantage of using this technique.

[2]

James processes his data in order to draw a histogram. His table of results is shown below.

Time spent using social media in minutes	0 –	15 –	30 –	60 –	120 – 240
Number of people per minute	12.2	14.0	8.4	7.3	3.1

(b) Show that the size of the sample is 1455.

[2]

(c) Calculate an estimate of the probability that a retired person spends more than an hour per day using social media.

[2]