

INDEPENDENT PRACTICE MATERIAL

Worksheet 1: Community library

US 32406 | 7 items | Untimed | Use a ruler, blank paper and standard calculator as needed.

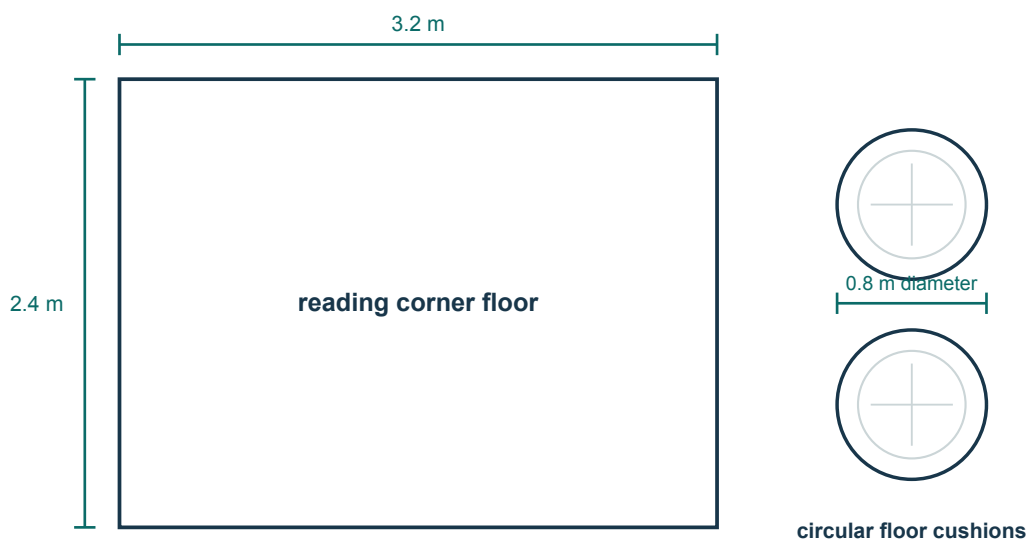
QUESTION 1 | Community library

- 1(a) A study room is booked from 2:35 pm until 4:10 pm.

How many minutes is the booking?

minutes

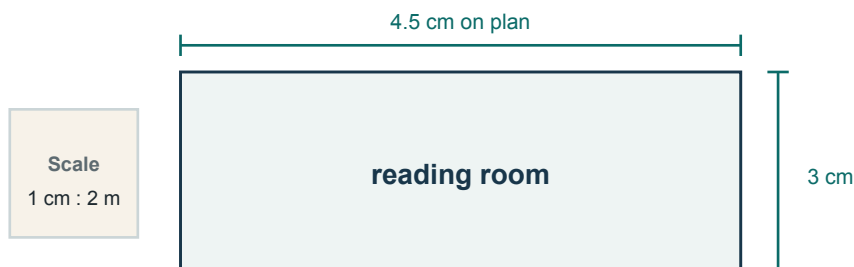
- 1(b) The diagram shows a rectangular reading corner and circular floor cushions at the same scale. The cushions must lie flat inside the reading corner without overlapping.



What is the greatest number of cushions that fit on the floor?

cushions

- 1(c) The plan of a reading room uses the scale 1 cm represents 2 m. On the plan, the room is a rectangle 4.5 cm long and 3 cm wide.



What is the real floor area of the room, in square metres?

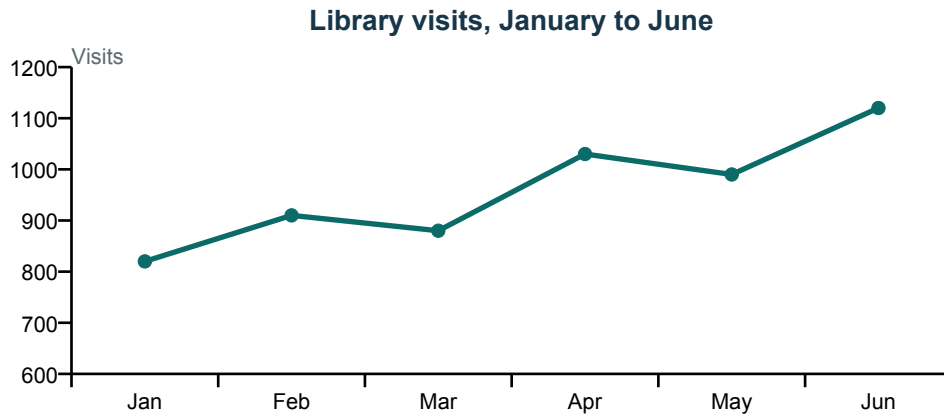
m²

- 1(d) A class returns 28 books. The average mass of each book is 0.42 kilograms.

What is the estimated total mass of the books, in kilograms?

 kg

- 1(e) The graph shows visits to the library from January to June. A board report says, 'Library visits increased every month from January to June.'



Do you agree with the report? Use at least three months and numbers from the graph to explain your answer.

Write your explanation below.

- 1(f) The table shows how many books fit on identical shelves.

Shelves	Book capacity
2	56
4	112
6	168
8	224

Which rule gives the book capacity from the number of shelves?

- (i) Add 28 to the number of shelves
- (ii) Multiply the number of shelves by 28
- (iii) Multiply the number of shelves by 56
- (iv) Subtract the number of shelves from 224

- 1(g)** A library trolley has a maximum load of 20 kilograms. There are 48 books with an average mass of 0.43 kilograms each.

**Using the average mass as an estimate, can all 48 books be moved in one load?
Explain your answer.**

Write your explanation below.
