

Topic test 2 (20 minutes)

Probability – Foundation (Calculator)

1 There are 30 students in a class. The students are asked whether they like going to the cinema (C) or watching TV (T).

The Venn diagram shows the results.



[1 mark]

1 (a) How many students like watching TV?

| | Answer | - |
|-------|--|-------------------------|
| 1 (b) | How many students like going to the cinema, but do not like watching TV? | [1 mark] |
| | Answer | - |
| 1 (b) | Work out the number of students who do not like watching TV or going to the cine | ma. [2 marks] |
| | Answer | - |

AQA Education (AQA) is a registered charity (number 1073334) and a company limited by guarantee register England and Wales (number 3644723). Our registered address is AQA, Devas Street, Manchester M15 6EX.

2 A survey of 1000 University students is carried out. The students are asked whether they live on the University campus (U) and whether they own a car (C).

The results are given below.

- 79 students live on the University campus and own a car.
- 401 students live on the University campus and do not own a car.
- 349 students own a car.
- **2 (a)** Use the given information to complete the Venn diagram.

[3 marks]



2 (b) A student is chosen at random.

What is the probability they do not live on the University campus and do not own a car? Give your answer as a fraction in its simplest form.

[2 marks]

Answer

3 Emma has 100 soft toys.

Some are teddy bears (T) Some of the toys are damaged (D).

The ratio of damaged toys to **not** damaged is 1 : 9.

70% of the damaged toys are teddy bears.

The ratio of teddy bears to \mathbf{not} teddy bears is 3 : 2

Use this information to complete the Venn diagram. You **must** show your working.

[5 marks]

Answer



END OF QUESTIONS