1. The Venn diagram shows the number of people in the sets B and R for Callie's house party. B is the set of guests that ate beans.

R is the set of guests that ate rice.

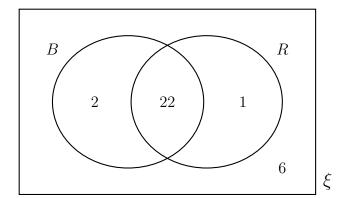
A guest was selected at random.

Write down

(i) P(B)

(ii) $P(B \cap R)$

.



2. This Venn diagram shows the number of walkers who are wearing a pair of boots, B and who are wearing a jacket, J.

A walker is picked at random.

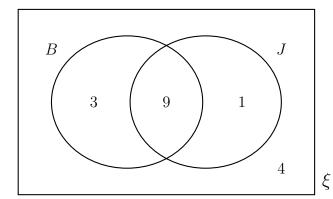
Write down

(i) P(*J* ′)

.

(ii) $P(B \cup J)$

.



.....

3. B is the set of commuters that catch a bus.

T is the set of commuters that catch a tube.

The Venn diagram shows the number of commuters in each set.

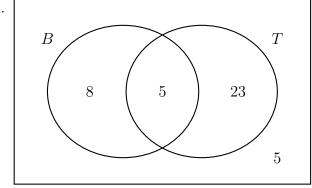
A commuter is selected at random.

Write down

(i) P(T')

.

(ii) $P(B \cap T)$



ξ

Answers $1 \text{ i)} \frac{24}{31} \text{ (ii)} \frac{22}{31} 2 \text{ i)} \frac{7}{17} \text{ (ii)} \frac{13}{17} \text{ (iii)} \text{ probability of boots or a jacket (or both)}$

3) (i)
$$\frac{13}{41}$$
 (ii) $\frac{5}{41}$