

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.

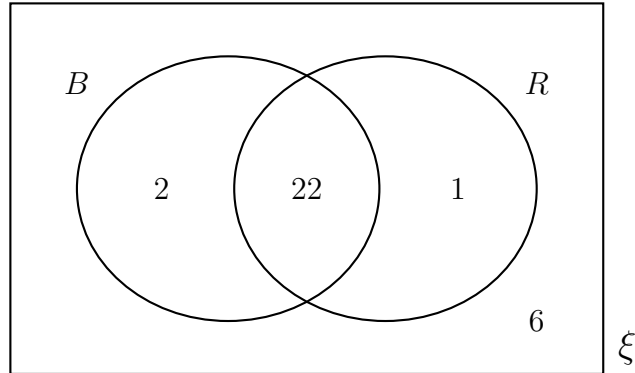
Write down

(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.

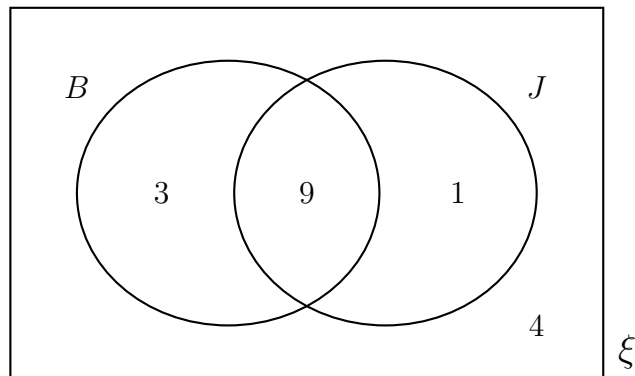
Write down

(i) $P(J')$

.....

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

.....



(ii) Describe in words what $P(B \cup J)$ means.

.....

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.

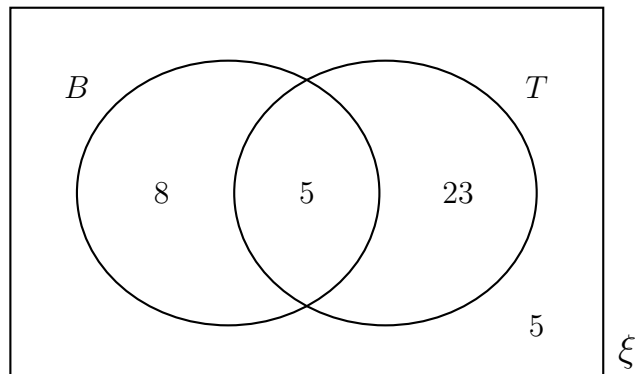
Write down

(i) $P(T')$

.....

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

.....



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

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