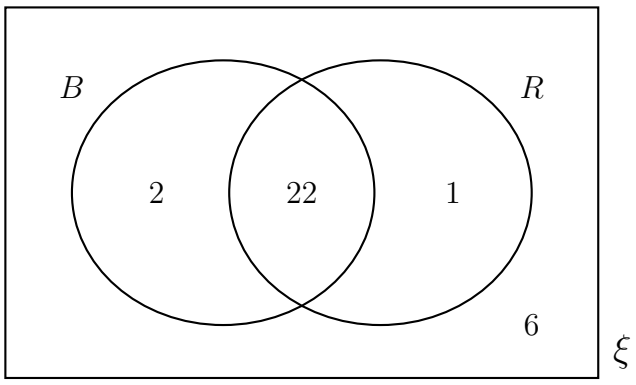
1. The Venn diagram shows the number of people in the sets B and R for Callie's house party.
   B is the set of guests that ate beans.
   R is the set of guests that ate rice.
   A guest was selected at random.
   Write down
   (i) P(B)

   . . . . . .

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

   . . . . . .

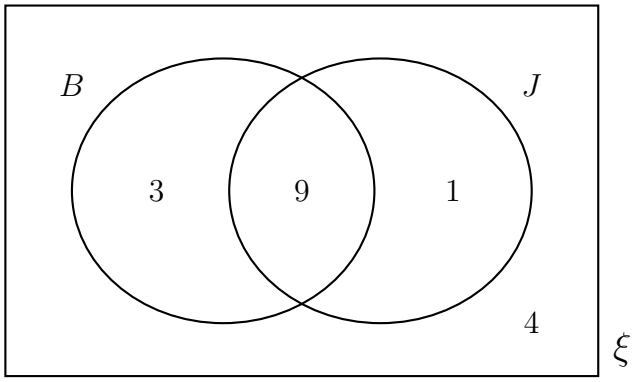


2. This Venn diagram shows the number of walkers who are wearing a pair of boots, B and who are wearing a jacket, J.
   A walker is picked at random.
   Write down
   (i) P(J')

   . . . . . .

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

   . . . . . .



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

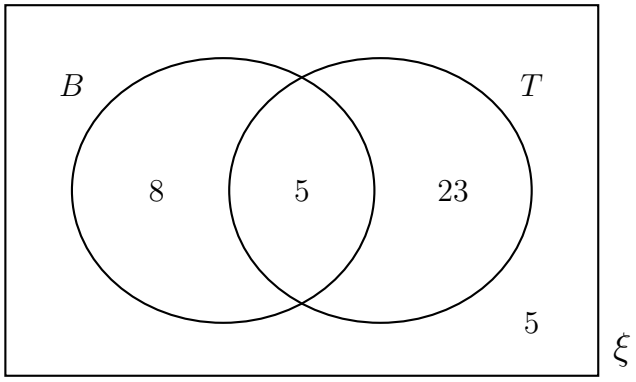
   . . . . . .

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($B \cap T$)

   . . . . . .



Q1 i) $\frac{24}{31}$ (ii) $\frac{22}{31}$ Q2 i) $\frac{7}{17}$ (ii) $\frac{13}{17}$ (iii) probability of boots or a jacket (or both) Q3 (i) $\frac{13}{41}$ (ii) $\frac{5}{41}$