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| 1 | | You are given that P(A) = 0.7 Work out P(A/) | | |
| 2 | | In the Venn diagram  ξ = students in a year group  A = left-handed students  B = vegetarians  A  B  25 15 45  115  ξ | | |
|  | | (a) | | Write down P(A ∩ B) |
|  | | (b) | | How many students are in the year group altogether? |
|  | | (c) | | A student from the year group is chosen at random.  What is the probability that the student is a right-handed vegetarian? |
| 3 | | On the Venn diagram, shade the area that represents P/ ∩ Q  P  Q | | |
| 4 | | A garage has 50 cars for sale.  16 of the cars have air conditioning and ABS brakes.  32 of the cars have air conditioning.  18 of the cars have ABS brakes.  Work out how many of the cars do **not** have air conditioning or ABS brakes. | | |
| 5 | | A running club has 120 members.  89 of the members take part in road races.  54 of the members take part in fell races.  17 of the members do not run in road or fell races.  Use this information to complete the Venn diagram.  R represents those members who run in Road races.  F represents those members who run in Fell races.  R  F  ξ | | |

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| 6. 80 people in a sports club were surveyed.   * 14 played tennis and squash * 56 played tennis * 30 played squash.   T  S  14  ξ | | | |
| (a) | Complete the Venn diagram. | | |
| (b) | One person is chosen at random.  Work out the probability that | | |
|  | | (i) | the person chosen did not play tennis |
|  | | (ii) | the person chosen played tennis or squash or both. |
| (c) | | What is the probability that a person chosen at random who plays squash also plays tennis? | |