|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Finding Probability from Two-Way Tables** | | | | | |
| **(a)** | | | **(b)** | | |
|  | | |  | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | The two-way table shows some information about the favourite subjects of some Year 10 and 11 students. |  | Art | Music | Drama | Total | | Year 10 |  |  | 33 | 88 | | Year 11 | 49 | 24 |  |  | | Total |  | 45 |  | 180 | | | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | The two-way table shows the favourite holiday destination of some people in their twenties. |  | France | Italy | Spain | Total | | Age 20 to 24 |  | 28 |  | 148 | | Age 25 to 29 | 44 |  |  | 110 | | Total |  | 59 | 136 |  | | | |
| (a) Complete the two-way table.  (b) A student is chosen at random. Find the probability that their favourite subject is Music.  (c) A student is chosen at random. Find the probability that they are a Year 11 student whose favourite subject is Drama. | |  | (a) Complete the two-way table.  (b) A person is chosen at random. Find the probability that they are aged between 25 and 29.  (c) A person is chosen at random. Find the probability that they are aged 20 to 24 and their favourite destination is Spain. | |  |
| **(c)** | | | **(d)** | | |
|  | | |  | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | The two-way table shows some information about the favourite fruits of two reception classes. |  | Apple | Orange | Banana | Total | | Class 1 |  | 11 |  | 28 | | Class 2 | 6 |  | 9 |  | | Total | 10 | 21 |  |  | | | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | The two-way table shows some information about languages studied by Year 7 and 8 students. |  | French | German | Spanish | Total | | Year 7 |  | 45 |  | 145 | | Year 8 |  | 52 | 73 |  | | Total | 86 |  |  | 310 | | | |
| (a) Complete the two-way table.  (b) A student is chosen at random. Find the probability that they are a student from Class 1 who likes bananas.  (c) A student from Class 2 is chosen at random. Find the probability that their favourite fruit is apple. |  | | (a) Complete the two-way table.  (b) A student is chosen at random. Find the probability that they are a Year 8 student who studies French or German.  (c) A student who studies Spanish is chosen at random. Find the probability that they are in Year 7. |  | |