## Probability from two way tables

1. The two way table shows the distribution of members of the audience at a play.

|  | Stalls | Circle | Balcony | Total |
| :---: | :---: | :---: | :---: | :---: |
| Adults | 36 | 39 |  | 112 |
| Children | 41 |  | 31 |  |
| Total |  | 60 |  |  |

(a) Complete the two way table
(b) What is the probability that a randomly chosen audience member is an adult and is seated on the balcony?
(c) What is the probability that a randomly chosen audience member is a child seated in the circle?
(d) What is the probability that a randomly chosen audience member is an adult?
(e) What is the probability that a randomly chosen audience member is sat on the balcony?
(f) What is the probability that a randomly chosen audience member is seated in the stalls?
(e) What is the probability that a randomly chosen audience member is a child?
2. The two way table shows which science some students prefer.

|  | Biology | Chemistry | Physics | Total |
| :---: | :---: | :---: | :---: | :---: |
| Girls | 21 | $\square$ | 26 | 73 |
| Boys | $\square$ | $\square$ | $\square$ | $\square$ |
| Total | 46 | 57 | $\square$ | 176 |

(a) Complete the two way table
(b) What is the probability that a randomly chosen student is a girl who prefers biology?
(c) What is the probability that a randomly chosen student is a boy who prefers physics?
(d) What is the probability that a randomly chosen student is a boy who prefers biology?
(e) What is the probability that a randomly chosen student is a boy?
(f) What is the probability that a randomly chosen student prefers biology?
(e) What is the probability that a randomly chosen student prefers physics?

