Simple probability - two way tables and frequency tables
Name:
Class:
Date:
Mark
16

1) The test results of 88 students is recorded in the two-way table below.

|  | Grade |  |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | A | B | C |  |
| Male | 15 | 20 | 13 | 48 |
| Female | 12 | 19 | 9 | 40 |
| Total | 27 | 39 | 22 | 88 |

One student is chosen at random.

Find the probability that the student is female and got a grade B. $\square$
2) The test results of 59 students is recorded in the two-way table below.

|  | Grade |  |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | A | B | C |  |
| Male | 15 | 18 | 5 | 38 |
| Female | 6 | 11 | 4 | 21 |
| Total | 21 | 29 | 9 | 59 |

One student is chosen at random.

Find the probability that the student is male. $\square$
3) The test results of a group of students is recorded in the two-way table below.

|  | Grade |  |  |
| :---: | :---: | :---: | :---: |
|  | A | B | C |
| Male | 14 | 20 | 4 |
| Female | 3 | 6 | 2 |

One student is chosen at random.

Find the probability that the student got an A. $\square$
4) The scores for a group of students are recorded in the table below.

| Score | Frequency |
| :---: | :---: |
| 3 | 2 |
| 4 | 2 |
| 5 | 15 |
| 6 | 10 |
| 7 | 11 |
| 8 | 3 |
| 9 | 3 |

Find the probability of selecting a student
a) with a score of 8 $\square$
b) with a score of 4 $\square$
5) The scores for a group of students are recorded in the table below.

| Score | Frequency |
| :---: | :---: |
| 8 | 2 |
| 9 | 3 |
| 10 | 7 |
| 11 | 6 |
| 12 | 5 |
| 13 | 1 |
| 14 | 2 |

Find the probability of selecting a student
a) with a score less than or equal to 11 $\square$
b) with a score greater than 13 $\square$
6) The scores for a group of students are recorded in the table below.

| Score | Frequency |
| :---: | :---: |
| 7 | 3 |
| 8 | 1 |
| 9 | 20 |
| 10 | 8 |
| 11 | 17 |
| 12 | 9 |
| 13 | 2 |
| 14 | 3 |

Find the probability of selecting a student
a) with a score less than or equal to 11 $\square$
b) with a score greater than 12 $\square$

## Solutions for the assessment Simple probability - two way tables and frequency tables

1) $P($ female and got a grade $B)=\frac{19}{88}$
2) $P($ got an $A)=\frac{17}{49}$
3) a) $\mathrm{P}($ less than or equal to 11$)=9 / 13$, b) $\mathrm{P}($ greater than 13) $=1 / 13$
4) $P($ is male $)=\frac{38}{59}$
5) a) $\mathrm{P}($ score of 8$)=3 / 46, b) P($ score of 4$)=1 / 23$
6) a) $\mathrm{P}($ less than or equal to 11$)=7 / 9$, b) $\mathrm{P}($ greater than 12 ) $=5 / 63$
