Edexcel GCSE Maths - Two Way Tables (FH) 1

 70 students each chose one P.E. activity. They chose one of basketball or swimming or football. The two-way table shows some information about their choices.

	Basketball	Swimming	Football	Total
Female	10			37
Male		17		
Total	19		22	70

(a) Complete the two-way table.

(3)

One of these students is picked at random.

(b) Write down the probability that this student chose basketball.

.....

(2) (Total 5 marks)

2. The two-way table shows some information about the colours of Ford cars and of Toyota cars in a garage.

	white	blue	red	Total
Ford	5			21
Toyota		7		
Total	9	16		40

(a) Write down the total number of white cars.

.....

(1)

3

(b) Complete the two-way table. (3)
(c) One of these 40 cars is to be picked at random. Work out the probability that this car will be blue.

10 01. (a) 12 15 37 17 33 9 7 19 29 22 70 B3 all correct (B2 for 4 or 5 entries correct) (B1 for 2 or 3 entries correct)

(b) $\frac{19}{70}$ 2 B2 for $\frac{19}{70}$, accept 0.27 (....)

(B1 for
$$\frac{\kappa}{70}$$
 with $0 < k < 10$ or for the correct probability incorrectly expressed, eg '19 out of 70')

[5]

02. 9 1 (a) B1 cao 3 (b) 5 7 21 9 4 7 8 19 9 16 15 40 B3 for all correct (B2 for 4 or 5 correct) (B1 for 1 or 2 or 3 correct)

[5]

(c)
$$\frac{16}{40}$$

= $\frac{2}{5}$
B1 for 2/5 oe

01. This question was answered well. In part (a), more than 80% of candidates completed the twoway table correctly and almost three quarters of candidates gave the correct probability in part (b).

02. Foundation Tier

This question was well understood and candidates were usually able to score some marks on this question, although the inability in some cases to fill in any of the numbers correctly in the two-way table was surprising. Incorrect notation for probability such as 16 out of 40 and 16:40 were often seen. Other errors on this part of the question were words such as likely or unlikely.

Intermediate Tier

Part (a) was answered extremely well. Some candidates gave the number of white Toyota cars rather than the total number of white cars. Only a handful of candidates failed to score any marks in part (b) with most completing the two-way table correctly. More than 80% of candidates gave the correct probability in part (c). Very few wrote a probability using incorrect notation.