

**FUNCTIONAL SKILLS PILOT
 PRINCIPAL EXAMINER'S REPORT**

FUNCTIONAL SKILLS	Mathematics	LEVEL	1
SESSION	March	YEAR	2008

1. Report on the work of candidates

General:

Overall, candidate performance was much improved from January 2008.

Candidates were better at showing their working in an orderly fashion and in referring to their results when justifying answers. However, many candidates placed multiple actions on one line with "equal" signs between them when, clearly, each stage of the process was not equal. This often led to mistakes in both method and calculation. A few candidates incorporated their working within essays rather than annotating the solutions.

Many answers were sensible and suggested that candidates had a reasonable grasp of the numbers they were working with. An exception to this was when conversion between units was required.

Few candidates seemed to be wrongly entered for the level and most could make a sensible start to each of the tasks.

There was little evidence that candidates were unable to read and understand the tasks in the contexts in which they were set.

Few candidates made use of the planning sheet to plan a route through the solution. Where these were used it was often for rough working.

The total marks available for this assessment were 48. The pass mark for this assessment was 30.

Task 1

- (a)** Candidates generally answered this correctly without working. However, when a wrong answer was given without evidence that it was achieved through division by 2, marks were lost. 525g was a common wrong answer.
- (b)** This was answered well, often with correct working. Where wrong methods were used, candidates frequently multiplied by 48 or 40 with no attempt to find a sensible scale factor. Conversion between units, when attempted, caused some problems with a significant number of candidates unsure that 1000g = 1kg.

- (c) Candidates generally scored well although the standard of drawing graphs was often poor. Many candidates counted the marks in the table and did not write down their totals. They did, however, draw columns or plot points but, where the standard of drawing was poor, it was difficult to determine whether their counts were correct. Candidates need to be reminded that axes require titles and that columns should be of equal width. Some candidates addressed one of Jane's statements but not both.

Task 2

- (a) Most candidates chose June correctly but a minority chose July.
- (b) Range was not well understood. Some gave the correct maximum and minimum values and failed to subtract them. Some confused temperature with rainfall but many worked out the mean or median.
- (c) Many candidates showed clear working in this section. They failed, however, to appreciate that a journey to an airport has to be repeated when returning home. This caused many wrong answers and a significant number of candidates scored below full marks on this section. It was concerning to see candidates add miles to £s without concern, as it was when they worked out $20 \times 300 = 6000$, thought this was £ and then gave the cost of flying from Heathrow as £6090! A very expensive holiday, even without the lost baggage.

Task 3

- (a) Many candidates identified the £49 fare but some gave alternatives, without deciding between them, and did not score full marks.
- (b) Many correct answers were seen. A minority gave alternatives, e.g. by car ferry **or** Eurotunnel, but did not choose between them. Some gave incorrect maximum fares. £137 is not the maximum fare available as this train does not leave until 08:20 and is outside the time frame of the context.
- (c) This part was generally well answered and many, well structured solutions were seen. However, major causes of loss of marks were as follows.
- Thinking the motorway distance was 60 miles.
 - Misusing the formula and dividing 20 by 300 rather than 300 by 20.
 - Misusing the fuel consumption figures and substituting the wrong values for motorway and main road travel or only using one figure in both calculations.
 - Calculating an answer to the formula, which should have been in litres, and thinking this was € (Misuse of units.)
 - Providing an answer based on interpreting the situation without significant reference to the values, ie. "The motorway is cheaper as it is shorter."

2 Guidance for Centres

Candidates appeared better prepared for this assessment than was the case in January and have a better understanding of the Standards against which their answers are assessed.

Centres should be aware that the three tasks will be posed with the following features.

- There will be irrelevant data from which appropriate data must be selected.
- Candidates will be required to structure a solution in a logical manner.
- Candidates will be required to reach a conclusion and justify it with reference to their results.

In consequence, centres are encouraged to take the following actions:

- Ensure that candidates are exposed to solving problems, structuring their methods clearly and justifying their solutions.
- Encourage candidates to write steps in their solutions, in draft form, before carrying out detailed calculations (use of the Planning Sheet).
- Candidates discuss their methods and solutions and thus, become aware of flaws in logic and unlikely answers (such as travel costs of £000s or ingredients in many kg).
- Candidates are aware of basic unit conversions (1000g = 1kg etc)
- Candidates improve the quality of drawings, using rulers carefully.