Free-Standing Mathematics Qualification January 2008
Intermediate Level

HANDLING AND INTERPRETING DATA
6986/2PM Unit 6

## PRELIMINARY MATERIAL

## DATA SHEET

To be issued to candidates between Friday 18 January 2008 and Friday 25 January 2008

## REMINDER TO CANDIDATES

YOU MUST NOT BRING THIS DATA SHEET WITH YOU WHEN YOU SIT THE EXAMINATION. A CLEAN COPY WILL BE MADE AVAILABLE.

## Charter airline delay

In the summer period of 2005, from April to October, $10.9 \%$ of all charter flights operated by the leading holiday airlines were more than one hour late. The table below gives, for five airlines, the percentage of flights which were more than one hour late in this summer period, together with the average delay.

| Charter Airline | Percentage of flights more <br> than one hour late | Average delay <br> (minutes) |
| :--- | :---: | :---: |
| Bmi | 14.3 | 37.3 |
| First Choice Airways | 5.7 | 16.7 |
| My Travel Airways | 8.5 | 23.7 |
| Monarch Airlines | 12.8 | 33.2 |
| Thomsonfly | 6.4 | 17.9 |

## Supermarket

A supermarket recorded the amount spent, in pounds, by each of the 150 customers who passed through one check-out on one morning.

The data are given in the table below.

| Amount spent, $\mathbf{£} \boldsymbol{a}$ | Number of customers |
| :---: | :---: |
| $0.00<a \leqslant 10.00$ | 3 |
| $10.00<a \leqslant 20.00$ | 12 |
| $20.00<a \leqslant 30.00$ | 10 |
| $30.00<a \leqslant 35.00$ | 15 |
| $35.00<a \leqslant 40.00$ | 24 |
| $40.00<a \leqslant 50.00$ | 29 |
| $50.00<a \leqslant 60.00$ | 18 |
| $60.00<a \leqslant 80.00$ | 22 |
| $80.00<a \leqslant 90.00$ | 10 |
| $90.00<a \leqslant 100.00$ | 5 |
| $100.00<a \leqslant 110.00$ | 2 |
| Over 110 | 0 |

## Mobile phones

As part of her Business course, Alana asked 120 students in her college for how many minutes they had used their mobile phones in the last month.

The results are listed in the table below.

| Number of minutes, $\boldsymbol{t}$ | Number of students |
| :--- | :---: |
| $0<t \leqslant 200$ | 0 |
| $200<t \leqslant 250$ | 1 |
| $250<t \leqslant 300$ | 5 |
| $300<t \leqslant 350$ | 8 |
| $350<t \leqslant 400$ | 16 |
| $400<t \leqslant 450$ | 24 |
| $450<t \leqslant 500$ | 29 |
| $500<t \leqslant 550$ | 22 |
| $550<t \leqslant 600$ | 8 |
| $600<t \leqslant 650$ | 5 |
| $650<t \leqslant 700$ | 2 |
| Over 700 | 0 |

## Television licences

In 2005, the total number of households with television licences was 24.7 million.
Details of the types and numbers of television licences possessed are given in the table below.

| Type of licence | Number of households <br> (in millions) |
| :--- | :---: |
| Black and white only | 0.1 |
| Colour | 20.6 |
| Concessionary | 0.2 |
| Over-75 | 3.8 |

Households with black and white only television licences are unable to receive digital channels. Households with full licences may have the ability to watch additional digital channels. Eight million households do so by subscribing to Sky, others use cable or a freeview box. It is believed that $60 \%$ of households with colour licences have this digital facility.

It may be assumed that all those people with black and white only television licences watch only black and white televisions. Conversely, it may be assumed that those who watch only black and white televisions only have black and white television licences.


## END OF DATA SHEET

