

## Functional Skills Certificate

# FUNCTIONAL MATHEMATICS

Level 1  
Data Book (Examination)

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## Insert

### Instructions

- This copy of the Data Book is for use in the examination. It should not be given to students in advance.

### Advice

- This book will not be collected in for marking. Ensure that all working that you wish to have marked is written in the space provided in the question/answer book.

## Data Sheet for Minibus

### Hiring a minibus

Some companies charge  
 a fixed amount per day  
 plus  
 an amount per mile.

### Example

A company charges  
 £37 per day  
 plus  
 40p per mile.

Jack hires a minibus for 2 days and travels 358 miles.

$$\begin{aligned}
 2 \times \text{£}37 &= \text{£}74 \\
 358 \times 40\text{p} &= \text{£}143.20 \\
 \text{Total charge} &= \text{£}74 + \text{£}143.20 \\
 &= \text{£}217.20
 \end{aligned}$$

Jack has to pay £217.20

### Distance between places by road

The table shows the distances, in miles, between four places.

	Bristol	Exeter	Southampton	Truro
Bristol		81	100	168
Exeter	81		114	87
Southampton	100	114		198
Truro	168	87	198	

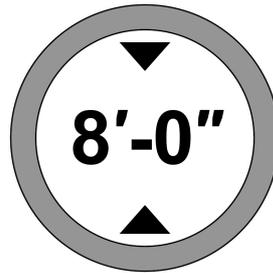
### Example

The distance between Exeter and Southampton is 114 miles.

## Low bridges



A sign tells drivers the maximum height of a vehicle that can pass under the bridge.



8' 0" is 8 feet 0 inches.

### Converting feet to metres

Use these steps to convert feet to metres.

**Step 1** Multiply the number of feet by 300

**Step 2** Divide your answer to **Step 1** by 1000

### Example

Convert 4 feet into metres.

**Step 1**  $4 \times 300 = 1200$

**Step 2**  $1200 \div 1000 = 1.2$

4 feet = 1.2 metres

Turn over ►

## Data Sheet for Wages

### National Minimum Wage

By law, all workers should be paid at least the National Minimum Wage.

This table shows the hourly rates for different ages.

Age (years)	16 to 17	18 to 20	21 to 24	25 or over
Hourly rate	£4.05	£5.60	£7.05	£7.50

### Piece workers

Some workers are paid for each item they make.

For example, Jenny makes shirts for a clothing company.

She is paid for each shirt she makes.

### Fair rate

This is the minimum amount piece workers should be paid for each item they make.

### To work out the fair rate

**Step 1** Work out mean number of items made per worker in one hour

**Step 2** Work out National Minimum Wage  $\div$  the answer to **Step 1**

**Step 3** Work out the answer to **Step 2**  $\times$  6

**Step 4** Work out the answer to **Step 3**  $\div$  5

The answer to **Step 4** is the fair rate per item.

### Example

A company employs piece workers to make hats.

All the workers are 25 years old or over.

The National Minimum Wage for these workers is £7.50

**Step 1** Mean number of hats made per worker in one hour = 15

**Step 2** £7.50  $\div$  15 = £0.50

**Step 3** £0.50  $\times$  6 = £3.00

**Step 4** £3.00  $\div$  5 = £0.60

The fair rate is 60p per hat.

**END OF DATA**