

Functional Skills Certificate

FUNCTIONAL MATHEMATICS

Level 2

Data Book (Examination)

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.

$$2 \times £37 = £74$$

$$358 \times 40p = £143.20$$

$$\text{Total charge} = £74 + £143.20$$

$$= £217.20$$

Jack has to pay £217.20

Distances 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	

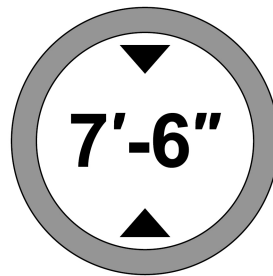
Example

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.



7' 6" is 7 feet 6 inches.

1 foot = 12 inches

Converting feet to metres

Use this formula.

$$m = 0.3048f$$

m is the height in metres

f is the height in feet

Turn over ►

Data Sheet for Wages

National Minimum Wage

By law, 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 Increase the answer to **Step 2** by 20%

The answer to **Step 3** is the fair rate per item.

Example

A company employs piece workers to make vests.

All the workers are 18 to 20 years old.

The National Minimum Wage for these workers is £5.60

Step 1 Mean number of vests made per worker in one hour = 16

Step 2 $\text{£}5.60 \div 16 = \text{£}0.35$

Step 3 Increasing $\text{£}0.35$ by 20% = $\text{£}0.42$

The fair rate is 42p per vest.

END OF DATA