## Edexcel GCSE

Mathematics (Linear) - 1MA0

## UTILITY BILLS

## Materials required for examination

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser.
Tracing paper may be used.

## Instructions

## Use black ink or ball-point pen.

Fill in the boxes at the top of this page with your name, centre number and candidate number. Answer all questions.
Answer the questions in the spaces provided - there may be more space than you need.
Calculators may be used.

## Information

The marks for each question are shown in brackets - use this as a guide as to how much time to spend on each question.
Questions labelled with an asterisk (*) are ones where the quality of your written communication will be assessed - you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.

## Advice

Read each question carefully before you start to answer it.
Keep an eye on the time.
Try to answer every question.
Check your answers if you have time at the end.

1. Mr Johnson works out the cost of the gas he used last year. At the start of the year, the gas meter reading was 8569 units.
At the end of the year, the gas meter reading was 9872 units.
Each unit of gas he used cost 44 p .
Work out the total cost of the gas he used last year.
2. Mr Holland uses 367 units of electricity in one month. He pays 5.84 p for each unit of electricity.
Mr Holland also pays a fixed charge of $£ 6.14$ for the month.
Work out the total amount he pays.
3. Here are two readings from a gas meter.

| 0 | 1 | 9 | 6 | 2 |
| :--- | :--- | :--- | :--- | :--- |


| 0 | 2 | 1 | 5 | 9 |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| April |  |  |  |  |  |

The difference in the meter readings gives the number of units of gas used. The cost of gas is 21 p for each unit of gas used.

Work out the cost of gas used.
Give your answer in pounds ( $\mathfrak{f}$ ).
4. Alison travels by car to her meetings.

Alison's company pays her 32 p for each mile she travels.
One day Alison writes down the distance readings from her car.
Start of the day: 2430 miles
End of the day: 2658 miles
Work out how much the company pays Alison for her day's travel.
5. Peter works out the cost of the gas he used last year.

At the start of the year, the gas meter reading was 12967 units.
At the end of the year, the gas meter reading was 14059 units.
Each unit of gas he used cost 44 p.

Work out the cost of the gas he used last year.
$\qquad$
*6. Here is part of Gary's electricity bill.

| Electricity bill |  |
| :---: | :---: |
| New reading | 7155 units |
| Old reading | 7095 units |
| Price per unit 15p |  |

Work out how much Gary has to pay for the units of electricity he used.
7. Mr Shah is working out the cost of the electricity he used in April.

| Electricity Meter Readings |  |
| ---: | :--- |
| 1 April | 79721 |
| 30 April | 80305 |
|  |  |

Mr Shah has to pay
21.3 p for each of the first 70 units used in April and 10.2 p for each of all the other units used in April.

Work out the total cost of the electricity he used in April.

