## Edexcel GCSE

Mathematics (Linear) - 1MA0 PERCENTAGES

## 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. Wayne bought an engagement ring for Tracy.

The total cost of the ring was $£ 420$ plus VAT at $17^{\frac{1}{2}} \%$.

(a) Work out the cost of the ring.
$\qquad$

Wayne invited 96 people to an engagement party.
Only 60 of the people invited came to the party.
(b) Express 60 as a percentage of 96 .
2. A doctor has 12000 patients.

4560 of these patients are male.
What percentage of these patients are female?
3. Martin had to buy some cleaning materials.

The cost of the cleaning materials was $£ 64.00$ plus VAT at $17^{2} \%$.

Work out the total cost of the cleaning materials.
£

## (Total 2 marks)

4. There are 800 students at Prestfield School.
$45 \%$ of these 800 students are girls.
(a) Work out $45 \%$ of 800

There are 176 students in Year 10.
(b) Write 176 out of 800 as a percentage.
5. Alistair sells books.

He sells each book for $£ 7.60$ plus VAT at $17 \frac{1}{2} \%$.
He sells 1650 books.
Work out how much money Alistair receives.
£.
(Total 4 marks)
6. A hotel has 56 guests.

35 of the guests are male.
(a) Work out 35 out of 56 as a percentage.
$\qquad$ \%
$40 \%$ of the 35 male guests wear glasses.
(b) Write the number of male guests who wear glasses as a fraction of the 56 guests. Give your answer in its simplest form.
7. The cost of a compact disc holder is 25 p . John has $£ 15$ to spend.
(a) What is the greatest number of compact disc holders that John can buy for $£ 15$ ?

A compact disc player costs $£ 50$ plus $171 / 2 \%$ VAT.
(b) Calculate the total cost of the compact disc player.

£ ...........................
8. Work out $28 \%$ of $£ 85000$
9. Work out $45 \%$ of 800
10. Bytes is a shop that sells computers and digital cameras.

In 2003, Bytes sold 620 computers.
In 2004, Bytes sold 708 computers.
Work out the percentage increase in the number of computers sold.
Give your answer to an appropriate degree of accuracy.
$\qquad$
11. Calculate $36 \%$ of $£ 4500$
$\qquad$
12. In April 2004, the population of the European Community was 376 million.

In April 2005, the population of the European Community was 451 million.
Work out the percentage increase in population.
Give your answer correct to 1 decimal place.
13. The cost of a radio is the list price plus VAT at $17 \frac{1}{2} \%$.

The list price of a radio is $£ 240$
Work out the cost of the radio.

£<br>(Total 3 marks)

14. Linda's mark in a maths test was 36 out of 50

Find 36 out of 50 as a percentage.
$\qquad$
\%
(Total 2 marks)
15. Ann buys a dress in a sale.

The normal price of the dress is reduced by $20 \%$. The normal price is $£ 36.80$

Work out the sale price of the dress.
$\qquad$
16. William's salary is $£ 24000$

His salary increases by $4 \%$.
Work out William's new salary.
17. The table shows the number of mobile phones sold in a shop in April and in May.

| April | May |
| :---: | :---: |
| 85 | 91 |

Work out the percentage increase in the number of mobile phones sold from April to May.
Give your answer correct to 3 significant figures.

