## Data sheet

Premium Bonds

## How they work

Premium Bonds cost $£ 1$ each (you cannot buy less than 100 at a time). Each bond has a number and each month the numbers from all the Premium Bonds that are held are put into a prize draw. A computer (nicknamed 'ERNIE' - Electronic Random Number Indicator Equipment) picks the winning numbers each month. The winning numbers win prizes from $£ 50$ to $£ 1$ million.

## Where does the money come from?

The amount of money available for prizes is calculated each month as $0.3 \%$ of the value of all the Premium Bonds held that month. A big attraction of Premium Bonds is that you can always get your money back by cashing in your bonds. In other words you have the chance of winning up to $£ 1$ million pounds without losing your money. The prize money is the amount that would have been paid in interest on the money if it had been put into a savings account.

## The prizes

About $£ 30$ billion worth of Premium Bonds are held by 23 million people in the UK. This means that about $£ 100$ million is available for prizes each month. The number of prizes is adjusted each month so that the chance of a single Premium Bond winning a prize is 1 in 24,000 . The prizes are in three groups: higher, medium and lower values.

In May 2007, there were a total of $1,474,002$ prizes and their total value was $£ 106$ million (to the nearest million).

The table following shows the number and the value of all the prizes available for May 2007. It shows, for example, that there were 344 prizes of $£ 5000$ each in May. This makes the total value of $£ 5,000$ prizes $=344 \times £ 5,000=£ 1,720,000$

## Premium bond prizes in May 2007

| Prize band | Prize value <br> $£$ | Number of <br> prizes |
| :--- | ---: | ---: |
| Higher value | 1 million | 2 |
|  | 100,000 | 17 |
|  | 50,000 | 35 |
|  | 25,000 | 69 |
| Medium value | 10,000 | 172 |
| Lower value | 5,000 | 344 |
|  | 1,000 | 4,244 |
|  | 500 | 12,732 |

## Questions Premium Bonds

1
(a) How many lower value prizes were there in May?
(b) How many more $£ 500$ prizes were there than $£ 1000$ prizes in May?

## 2

How much money was paid out in $£ 50,000$ prizes in May?

## 3

Tom buys $£ 250$ worth of Premium Bonds and holds them for one year. He wins one $£ 50$ prize during the year. At the end of the year he cashes in his 250 Premium Bonds and gets his money back.

Taking into account his $£ 50$ prize, what has been the percentage increase in Tom’s money over the year?

## 4

What is the average value of the Premium Bonds held by the 23 million people who hold them?
Give your answer to the nearest $£ 100$
$\qquad$
5
The total value of prizes in May was $£ 106$ million.
What percentage of the money available for prizes in May was taken up by the $£ 1,000,000$ and the $£ 100,000$ prizes altogether?
Give your answer to 1 decimal place.
$\qquad$
\%

6
What percentage of the total prize money was given out in lower value prizes in May?

