

GCSE Statistics - Diagnostic test

Crude rates and Index numbers

NAME: _____

1

The table shows index numbers for the costs of some items in June 2009 using June 2008 as base.

Item	Index number
Bread	120
Milk	110
Petrol	100
Games console	90
Potatoes	105

- (a) Which item had gone up by 10% from June 2008 to June 2009?

Answer (1 mark)

- (b) Explain the meaning of the index number of 100 for petrol.

.....
.....
(1 mark)

- (c) A loaf of bread cost 80p in June 2008.

Calculate the cost of an equivalent loaf of bread in June 2009.

.....
.....

Answer p (2 marks)

2

- (a) The village of Scotter has a population of 6000.
In 2007 there were 24 births in Scotter.

Calculate the crude birth rate for Scotter in 2007.

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.....

Answer (3 marks)

- (b) The village shop sells calendars at Christmas each year.
The table shows the prices of the calendar for the last three years.

Year	2005	2006	2007
Price	£8	£9	£10

Calculate an index for the price of the calendar in 2007 using 2005 as base year.

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.....
.....

Answer (3 marks)

3

The following table shows the total sales of wrapping paper, in £s, in the gift shop in 2002 and 2003.

Year	2002	2003
Sales (£)	75	87

- a) Taking 2002 as the base year, work out the index number for the sales in 2003.

.....
(2)

The sales of wrapping paper decreased in the gift shop by 5% between 2004 and 2005.

- b) Taking 2004 as the base year, complete the table to show the index numbers for the sales in 2004 and 2005.

Year	2004	2005
Index number		

(2)

Total _____ out of 14