

For Supervisor's use only

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90151



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA



National Certificate of Educational Achievement
TAUMATA MĀTAURANGA Ā-MOTU KUA TAEA

Level 1 Mathematics, 2006

90151 Solve straightforward number problems in context

Credits: Three

9.30 am Friday 24 November 2006

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should answer ALL the questions in this booklet.

You should show ALL working.

If you need more space for any answer, use the page(s) provided at the back of this booklet and clearly number the question.

Check that this booklet has pages 2–6 in the correct order and that none of these pages is blank.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

<i>For Assessor's use only</i>		Achievement Criteria	
Achievement		Achievement with Merit	Achievement with Excellence
Solve straightforward number problems in context.	<input type="checkbox"/>	Solve number problems in context involving manipulation, several steps or reversing processes.	Devise a strategy and solve a number problem. <input type="checkbox"/>
Overall Level of Performance		<input type="checkbox"/>	

You are advised to spend 25 minutes answering the questions in this booklet.

MONEY, MONEY, MONEY

You should show **ALL** working.

QUESTION ONE

A skateboard has a marked price of \$130.
There is a "60% off" sale.

What is the sale price of the skateboard?

Sale price \$ _____



QUESTION TWO

Yesterday petrol cost \$1.75 per litre.
Today the cost of petrol has gone up by 6 cents per litre.

What percentage increase is this?

Increase _____ %



QUESTION THREE

Tami bought a box of apricots.

Tami threw away $\frac{1}{3}$ of the box of apricots because they were rotten.

She gave away $\frac{1}{4}$ of the box of apricots.

What fraction of the box of apricots did Tami have left?

Fraction left _____



QUESTION FOUR

Jack is having a party for 40 people.
He is going to make Spaghetti Bolognese.

How much minced beef will he need to use?

Minced beef _____ kg

Spaghetti Bolognese
(serves six people)

0.75 kg minced beef

100 g tomato paste

$\frac{3}{4}$ cup water

2 tsp mixed herbs

2 tsp crushed garlic

300 g uncooked spaghetti

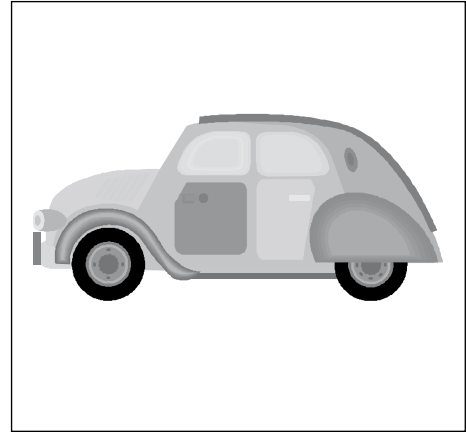
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QUESTION FIVE

Jill is buying a car that costs \$2 430 including GST.
Her father says he will pay the GST. (GST is 12.5%)

How much will Jill have to pay?

Jill will pay \$ _____

**QUESTION SIX**

Sione bought a car last year.
The car has reduced in value by 26.3% in one year.
It is now worth \$28 500.

Calculate the price Sione paid for his car **last year**.

Last year's price \$ _____



QUESTION SEVEN

Last year, Mr Bigg's company had an annual turnover of $\$9.56 \times 10^8$.

This year, the annual turnover is $\$1.0449 \times 10^9$.

What percentage increase is this for Mr Bigg's company?

Increase _____ %

**QUESTION EIGHT**

Jemima has \$5 000 to invest for two and a half years.

Her bank offers two different investment schemes:

Scheme 1

The client invests the money in an account that pays 3.25% interest **only** at the **end of each year**.

Scheme 2

The client invests the money in an account that pays 1.3% interest at the **end of each six months**.

Investigate each scheme and recommend to Jemima, with reasons, what she should do.
