

--	--	--

For Supervisor's use only

90151



NEW ZEALAND QUALIFICATIONS AUTHORITY
 MANA TOHU MĀTAURANGA O AOTEAROA



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

MATHEMATICS, 2002

Level 1

1.7 Solve straightforward number problems in context.

Credits: Three

9.30 am Wednesday 20 November 2002

Check that the Candidate Code Number 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.

Refer to page 2 of the Resource Sheet to answer the questions in this booklet.

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

Check that this booklet has pages 2–7 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. <input type="checkbox"/>	Devise a strategy and solve a number problem. <input type="checkbox"/>
Overall Level of Performance		<input type="checkbox"/>

You are advised to spend 30 minutes answering the questions in this booklet.

RAINBOW CHICKEN TAKEAWAYS

Show **ALL** working.

Use the information on page 2 of the Resource Sheet to help you answer Questions One and Six.

QUESTION ONE

Use the Resource Sheet to help you answer this question.

- (a) John has just started a part-time job at *Rainbow Chicken Takeaways*.

Staff get a 20% discount.

He buys: a 2-piece chicken and chips pack
a regular bean salad
a medium thick shake.

How much does John pay?

- (b) John works for 15 hours each week.

He earns \$8.50 per hour.

He banks \$50.00 each week.

What **percentage** of his earnings does he bank each week?

QUESTION TWO

Tara wants to invite a few friends to a party. She buys three Party Packs from *Rainbow Chicken Takeaways*.

- (a) $\frac{1}{3}$ of the chicken pieces are breasts, $\frac{1}{10}$ are wings and the rest are legs.

What **fraction** of the chicken pieces are **legs**?

- (b) Party Packs consist of two types of chicken; original and spicy.

The 30 pieces of chicken are in the ratio of **2:3** between original and spicy.

How many pieces of chicken are spicy?

QUESTION THREE

A Party Pack costs \$24.95.

Tara wanted to know the percentage that she would save by buying a Party Pack instead of buying each of the four items separately.

A Party Pack is made up of four items:

- | | |
|------------------------|---------|
| • 10 pieces of chicken | \$18.50 |
| • 1 large chips | \$3.25 |
| • 1 large potato salad | \$3.85 |
| • 1 garlic bread | \$2.95 |

Calculate the **percentage saving** by buying the Party Pack instead of the four items separately.

QUESTION FOUR

A Party Pack costs \$24.95 including GST (goods and service tax) of 12.5%.

Calculate the **price** of the Party Pack before the GST was added.

QUESTION FIVE

The results of a survey suggest that last week:

- four in every five of the 2.9×10^6 people in the North Island ate chicken
- 17 in every 20 of the 8.1×10^5 people in the South Island ate chicken.

How many **more** people ate chicken in the North Island last week than in the South Island?

Give your answer in **standard form**.

QUESTION SIX

Use the Resource Sheet to help you answer this question.

Ben and Debbie each organised their own end of year class party.

32 people went to Ben's party.

Ben got a discount of 15% off the full price for his order through a friend.

25 people went to Debbie's party.

Debbie ordered her food through her school and got it at a reduced price.

The reduced price of Debbie's order excluded both the 28% mark-up and the 12.5% GST.

Debbie's school will pay the GST.

<p>Ben's order for the party was:</p> <ul style="list-style-type: none"> • 3 × 15-piece meals • 24 large side orders • 3 × 12-piece meals • 12 × single serve desserts 	<p>Debbie's order for the party was:</p> <ul style="list-style-type: none"> • 4 × Family Feasts • 15 large side orders • 4 × 12-piece meals • 10 × single serve desserts
---	---

