

SUPERVISOR'S USE ONLY

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if you have NOT written in this bookletMana Tohu Mātauranga o Aotearoa  
New Zealand Qualifications Authority

## Level 3 Accounting

### 91408 Demonstrate understanding of management accounting to inform decision-making

Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of management accounting to inform decision-making.	Demonstrate in-depth understanding of management accounting to inform decision-making.	Demonstrate comprehensive understanding of management accounting to inform decision-making.

## SAMPLE ASSESSMENT

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 attempt ALL parts of the question in this booklet.**

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–8 in the correct order and that none of these pages is blank.

Do not write in any cross-hatched area (DO NOT WRITE). This area will be cut off when the booklet is marked.

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



*Alumnz Limited* manufactures a range of boats including aluminium dinghies.

The directors are considering expanding *Alumnz Limited's* factory and purchasing a new machine to increase production of aluminium dinghies, which have become increasingly popular over recent months.

The expansion of the factory and purchase and installation of new machinery will cost \$720 000.

This will be partly financed by a fixed-term two-year loan of \$480 000, with interest of 9% p.a. flat rate payable monthly for the 24 months.

An initial down payment of \$300 000 for the purchase of the machine will be made in September, followed by three equal monthly payments of \$140 000.

The new machine can produce up to 40 aluminium dinghies per month. Production information is shown in the table below.

#### Aluminium dinghy production information

Selling price	\$10 000
Variable cost	\$5 500
Fixed costs total per month	\$13 500

The expected monthly sales of aluminium dinghies, assuming the new machinery is purchased, are shown in the table below.

#### Expected monthly dinghy sales

High season						Low season
Sept	Oct	Nov	Dec	Jan	Feb	March to August
18	20	23	25	22	20	Average 15 per month

Complete all parts of this assessment. Show your working for calculations. Round numbers of dinghies to the nearest whole number.

- (a) Explain why the decision to purchase a new machine to produce aluminium dinghies is a strategic decision for *Alumnz Limited*.

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- (b) Calculate the monthly break-even sales of dinghies.

Break even at: _____ aluminium dinghies per month
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- (c) Calculate the average monthly sales, in units, needed for *Alumnz Limited* to earn an annual profit of \$804 000 from aluminium dinghy sales.

_____ aluminium dinghies per month
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- (d) Explain in detail, with reference to relevant calculations, whether the annual profit of \$804 000 from aluminium dinghies is achievable based on the estimated number of dinghies sold each month. In your answer, include reference to the seasonal nature of dinghy sales.

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The following budget estimates of dinghy sales, which assume the new machinery is purchased, have been made for September, October, and November.

	September	October	November
Dinghy sales \$ (25% cash and 75% credit)	180 000	200 000	230 000

Receipts from credit sales are typically received as follows:

- 80% in the month following sale
- 19% in the second month after sale.

1% of credit sales are allowed for potential bad debts when preparing the cash from credit sales budget.

- (e) Calculate the cash from credit sales for October and November in the table below. August's credit sales have been entered for you.

Credit sales in	Amount	Cash received in	
		October	November
August	120 000		
September			
October			
<b>Total cash from credit sales</b>			

- (f) Complete the cash budget for aluminium dinghies for October and November by:
- completing the estimated receipts section
  - adding the amounts for interest on loan and machinery payments
  - calculating the total payments
  - calculating the surplus or deficit of cash.
- Note: you are not required to calculate an estimated bank balance.

**Alumnz Limited**  
**Cash budget for aluminium dinghies**

	October	November
<b>Estimated receipts</b>		
Cash sales		
Credit sales		
Total estimated receipts		
<b>Estimated payments</b>		
Raw materials	58 305	63 375
Direct labour	23 520	26 880
Factory overhead	24 000	27 600
Selling and distribution expenses	13 900	15 400
Interest on loan		
Machinery		
Total estimated payments		
Surplus (deficit) of cash		

With the final machinery payment plus a quarterly provisional tax payment due in December, the finance manager is planning to meet with the bank manager in November about the possible need for a \$15 000 overdraft in December.

- (g) Make a recommendation to the directors of *Alumnz Limited* as to whether the company should purchase the new machine to assist with meeting its annual profit target of \$804 000 from the sale of aluminium dinghies. Your answer should include:
- detailed financial and non-financial information, including information from previous answers
  - additional calculations and /or non-financial information necessary to support your recommendation
  - a conclusion justifying your recommendation.

You may make any reasonable assumptions in the context of *Alumnz Limited*.

Use the space on page 6 to plan your answer. This may be used for planning purposes. Start writing your answer on page 6.

**PLANNING**

**Financial considerations**

**Non-financial considerations**

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