**4** K Limited uses absorption costing at one of its factories. The product manufactured in this factory goes through two production departments: cutting department and finishing department.

The following budgeted information was available for the year ended 31 December 2023.

	Cutting department	Finishing department
Overhead absorption rate	\$3.62	\$2.34
Labour hours	17400	8400
Machine hours	22900	5200

A customer placed an order for 250 units in November 2023. The following budgeted information is available about the production of one unit.

Per unit	
Direct materials	\$17.28
Direct labour Cutting department Finishing department	1.2 hours at \$11.50 per hour 3.1 hours at \$11.50 per hour
Machine hours Cutting department Finishing department	2.2 hours 1.4 hours

Selling prices are set to achieve a profit margin of 40%.

(a)	Prepare a statement to show the total selling price for the customer's order.
	[5]

# **Additional information**

Actual production hours for the year ended 31 December 2023 were as follows:

	Cutting department	Finishing department
Labour hours	16200	7 900
Machine hours	24300	5800

Total actual overheads were the same as budgeted overheads.

(b)	Calculate the over-absorption or under-absorption of overheads for <b>each</b> production department for the year ended 31 December 2023.
	[4

# **Additional information**

K Limited uses marginal costing at **another** factory where a single type of product is made.

The following budgeted information is available.

	\$ per unit
Selling price	42
Direct materials	12
Direct labour (1.5 hours per unit)	18
Other variable costs	3

Fixed costs per month are \$38500.

Currently the factory is producing 9920 units per month.

(c)	Calculate both the <b>total</b> monthly contribution and the <b>total</b> monthly profit currently being made in this factory.	ng
		2

#### **Additional information**

The directors hope to increase demand by changing the selling price. They are considering the following two options.

### Option A

- 1 Reduce the selling price per unit by 5%.
- 2 Increase production by 4000 units on the current production level.
- 3 A commission of \$0.25 per unit will be paid.
- 4 Overtime will be required on all units produced over 12400 units and is paid at a premium of 25%.
- 5 Cancel the current advertising campaign costing \$8000 a month.

## Option B

- 1 Reduce the selling price per unit to \$41.
- 2 Increase production by 10% on the current production level.
- 3 Invest in more up-to-date machinery at a cost of \$180 000.
- 4 It is proposed to partly finance the purchase of new machinery by borrowing \$150000 at 8% per annum interest.
- 5 Machinery is depreciated by 25% per annum on cost.
- As a result of improvements to machinery, the time each worker takes to produce one unit will be reduced by 8% and a higher quality product can be made.

(d)	Prepare marginal costing statements to show the monthly forecast profit, rounded to the <b>nearest</b> dollar, for <b>each</b> option.		
	(i)	Option A	
		[6]	

(ii)	Option B
	[6]

ors which option they should choose. Justify your advice by discussing <b>both</b> financial factors.	(e)
[7]	