3 Bilanben Ltd manufactures grass-cutting equipment. The following was the cost of production for the year ended 31 December 2003, based on a normal capacity of 4500 units.

	$
Direct Materials	157 500
Direct Labour	270 000
Variable Overheads	54 000
Fixed Overheads	125 000
	606 500

There are 30 production workers who each work a 30-hour week and have two weeks unpaid holiday per annum.

Additional costs, based on a production of 5000 units, are administrative overheads of $140 000, of which 50% are fixed, and $150 000 for advertising.
Selling price is $250 per unit.

The Sales Director has suggested that during 2004 he can sell 5000 units at $250 each.
There are **three** options to fulfil this requirement.

Option 1
To introduce overtime. This would require a pay rise of 50% per hour after the normal 30 hours. There would also be an additional cash payment of $1.50 for each extra hour worked.

Option 2
To hire new machinery for one year at a cost of $50 000. This would leave all variable costs unchanged. This was already under consideration and $17 500 had been spent on market research.

Option 3
To buy in the extra units at a cost of $200 each.

REQUIRED

(a) Calculate the net profit on the 2003 production of 4500 units, assuming all were sold.

....

....

....

....

....

....

....

....

....

[10]

(b) Prepare statements showing the profitability of **each** of the three options.

....

....

....

.... [17]

(c) Write a brief statement comparing the three options.

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

.... [3]