OPTIMAL PRODUCTION PLAN AND CALCULATION OF NET PROFIT AFTER TAXATION

	Hiking	Mountain		
STEP 1 - Assessment of adaquacy of leather				
10% of Material Cost (10% of 600/700)	60	70		0,5
Square Meters required (60/70 divided by 50)	1,2	1,4		1
Sales (10 000/8000 *1.05)	10 500	8 400		
Increase in stock (Unit sales *1.1)	1 050	840		1
Production	11 550	9 240		
SQM Leather Required	13 860	12 936	26 796	0,5
Shortage (limit of 16 000SQM)			10 796	0,5
Labour is not a scarce resource as unskilled and can be employed on a casual basis				0,5
There are no capacity constraints as the factry can manufacture 22 000 units per annum				0,5
STEP 2. Calculation of Per Unit Contribution				
	Hiking	Mountain		
Labour Costs- Current year (250*10000, 8000*300)	2 500 000	2 400 000		0,5
Variable Labour Costs - Current Year (10 000*3*40; 8000*4*40)	1 200 000	1 280 000		0,5
Fixed Labour Costs- Current year	1 300 000	1 120 000		0,5
Fixed Labour costs next year (Current Year *1.06)	1 378 000	1 187 200		0,5
Variable Cost Next year (120*1.06; 160*1.06)	127	170		0,5
Manufacturing overhead costs				
Total Overheads Per unit	250	300		0,5
Fixed (250*.7; 300*.7)	175	210		0,5
Total Fixed overheads	1 750 000	1 680 000		0,5
Variable overheads per unit	75	90		0,5
Selling Costs (100* 10 000; 140 * 8 000)	1 000 000	1 120 000		0,5
Fixed Selling - current year (@40%)	400 000	448 000		0,5
Fixed Selling -next year	440 000	492 800		
Variable Selling cost Per unit	60	84		0,5
Variable Selling Cost per unit next year	66	92		
Contribution per pair				
Selling Price (.88*1800; .94*2200)	1584	2068		1
Variable Costs	934	1129		
Material-other (.9*600*1.1 ; .9*700*1.1)	594	693		1
Material- Special leather (1.2*60 ; 1.4*60)	72	84		1
Labour	127	170		1
Production Overhead	75	90		1
Selling Costs	66	92		1
Contribution per Unit	650	939		0,5
Square Meters of leather per unit	1,2	1,4		0,5
Contribution per square meter of leather	542	670		0,5
Ranking	2	1		0,5
Available square meters of leather		16 000		0,5
Required for manufacture of 9240 pairs of M boots		12 936		0,5
Balance of leather available		3 064		0,5
Hiking Boots (3064/1.2)		2 553		1

Budgeted Total Profit for the next year		Hiking	Mountain		
Sales		2 321	8 400		0,5
Production		2 553	9 240		0,5
Closing Stock		232	840		0,5
SALES (2321 * 1 584; 8400* 2068)		3 676 464	17 371 200		
PRODUCTION		5 344 004	12 449 080		
Variable Labour (127*2553; 170*8400)		324 231	1 570 800		1
Fixed Labour		1 378 000	1 187 200		1
Direct Matrial - Other (594 ; 693)		1 516 482	6 403 320		1
Direct Material -Leather (72, 84)		183 816	776 160		1
Variable Overheads (75 ; 90)		191 475	831 600		1
Fixed Overheads		1 750 000	1 680 000		1
Closing Stock		485 628	1 131 735		0,5
GROSS PROFIT	-	1 181 912	6 053 855		0,5
Selling overheads		153 186	588 000		1
Other Overheads	-	1 335 098	5 465 855	4 130 757	
Other Overheads				2 050 000	0,5
Net Profit before Taxation				2 080 757	0,5
Taxation				582 612	0,5
Net Profit After Taxation				1 498 145	0,5
					30,5 max 25

POSSIBLE INTERVENTIONS TO ENHANCE PROFITABILITY

1. To consider the migration to a ABC costing system for the allocation of overheads. The current system may not be appropriate given the price pressures and the need for more accurate costing information
2. Undertake a tear down analysis on the mountain and hiking boots to consider is a substitute can be found for the specialised leather
3. Investigate opportunities for local suppliers to produce the specialised leather required.
4. Consider importing certain raw materials to benefit from the strengthening of the rand
5. Consider moving manufacturing overseas if most of the products are exported , however this will result in job
6. Diversification into apparel and expanding the range of boots for example running shoes.
7. Rebranding or advertising campaigns to increase turnover of mointain boots
8. Diversifying sales of the mountain range locally

10. Consider outsourcing of production to more established footwear manufacturers and focus on the sales and marketing
11. Allowing other manufacturers to utilise the patented sole
12. Consider a dual pricing structure for export sales and local sales
13. Sell in rand based denomination
14. Consider utlising production from other developing countries (consider the differences in accounting standards, labor laws and environmental regulations)

1 Mark per valid item, maximum 10

FACTORS TO BE CONSIDERED BY ROGER STAR

1. Reasonableness of Offer

The PE Ratio of OAG of 10 can be utilised to value BB on a PE Method as it is the only available method	1	
Discount for Private company, transferability of shares etc reduces the PE ratio to 8	2	
Using LME of R1,5 m and 8 gives a value of R12 m, 51% will be valued at R6,12 m	3	
It does appear to be fair but opportunistic, considering that the profit in the prior year was R4,2 m after taxation	2	
Also that profit has been reduced due to the shortage of the leather , if this is alleviated profit could increase by app	1	
Also the value based on last years profit as a LME s approximately R17m. (R4,2 m * 8 *51% = R17m)	2	

OTHER FACTORS

Shareholders agreement with Business Partners and whether Business Partners has the right fo first refusal	1	
The amount of working capital that will be injected by AOG and its positive impact on profitability	1	
The synergy and business potential that could be brought into the business by AOG	1	
Will Roger continue to own the patent and the amount of revenue he will derive	1	
Will there by any retrenchment of workers	1	
Will Roger continue to be employed by the BB if his shares are sold	1	
Will OAG be a strategic and cultural fit for existing business established by BB	1	
How will acquisition by OAG affect existing supplier contracts/agreements held by BB	1	
Is there any limitations to use of OAGS cash injection	1	max 10
	20	