## Calculation

Management Accounting What is the contribution margin per unit for a box of peanut fudge What is the contribution margin ratio A. Contribution Margin $=$ Selling Price - Direct Cost

Brittle, Inc.'s direct costs are:
Peanuts\$0. 70
Sugar\$0. 35
Butter\$1. 85
Other ingredients\$0. 34
Box, packing material\$0. 76
Selling commission\$0. 20
Total Direct Costs $=\$ 0.70+\$ 0.35+\$ 1.85+\$ 0.34+\$ 0.76+\$ 0.20$
$=\$ 4.2$
Contribution Margin $=\$ 5.60-\$ 4.2$
$=\$ 1.40$
B. Contribution Margin Ratio = Contribution Margin/Selling Price
$=\$ 1.40 / \$ 5.60$
$=0.25$
2. How many boxes must be sold to break even What is the break-even sales revenue

Fixed Costs $=$ Fixed Overhead + Fixed Selling and Administrative Costs
$=\$ 32,300+\$ 12,500$
$=\$ 44,800$
A. Break-even in Units $=$ Fixed Costs $/$ Contribution Margin
$=\$ 44,800 / \$ 1.40$
$=32000$ boxes
B. Break-even in Sales $=$ Fixed Costs $/$ Contribution Margin Percentage
$=\$ 44,800 / 0.25$
$=\$ 179,200$ in sales revenue
3. What was Brittle's operating income last year

Operating Income $=$ Revenue $-($ Direct Costs + Fixed Overhead Costs + Fixed Selling and Administrative Costs)

Revenue $=$ Selling Price $\times$ Sales Volume
$=\$ 5.6 \times 35,000$
= \$196, 000
Revenue (\$5. 6 * 35, 0000)\$196, 000
Direct Costs (\$4. 2 * 35, 000)\$147, 000
Fixed Overhead Costs \$32, 300
Fixed Selling and
Administrative Costs \$12, 500
Operating Income \$4, 200
4. Suppose that Brittle, Inc. raises the price to $\$ 6.20$ per box but anticipated sales drop to 31,500 boxes. What will the new break-even point in units be Should Brittle raise the price Explain.

New Contribution Margin = \$6. 20-\$4. 20
$=\$ 2.0$
A. New Break-even Point = Fixed Costs / Contribution Margin
$=\$ 44,800 / \$ 2$
$=22,400$ units
B. The decision can be best assessed by looking at the new profit level given the new price and the new sales volume.

New Operating Profit

Revenue (\$6. 2 * 31, 500)\$195, 300
Direct Costs (\$4. 2 * 31, 500)\$132, 300
Fixed Overhead Costs \$32, 300
Fixed Selling and
Administrative Costs \$12, 500
Operating Income \$18, 200
It can be deduced that higher pricing, which causes drop in demand is still more profitable than the previous scenario. The lower break-even volume even implies that the company can break even at a lower sales volume. Thus, the company should pursue higher pricing to improve profit.

