

Premiere sells 2 models of Ice Cream Makers
 Mr. Ice Cream and Cold King.
 Current Sales total 60000 Units, (21000 Mr and 39000 King)
 Cost Information

	Mr. Ice	Cold King
Selling Price per Unit	\$ 37.00	\$ 43.00
Variable Costs per Unit	\$ 20.50	\$ 32.50

Fixed Selling Salaries \$200 000

Mgmt is contemplating a change to compensation plans to a commission based system, to boost the company's presence in the marketplace

Plan A - 10% commission computed on gross dollar sales
 Expected Sales - Mr. Ice 19500 Units, Cold King 45500 units

Plan B - 30% Commission computed on Contribution Margin
 Expected Sales - Mr. Ice 39000 units, Cold King 26000 units

Required

- 1) Define Sales Mix
- 2) Compare Plan A to the current arrangement
 - (a) Will they achieve their objective of increased presence
 - (b) From sales mix perspective, which product will sales team promote?
 - (c) Will sales team be satisfied with Plan A?
 - (d) Will premiere be satisfied with Plan A's impact on profits?
- 3) Compare Plan A and Plan B with respect to total units sold and sales mix
- 4) Compared to flat salaries is Plan B more attractive to the sales team? Company?

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Premier Appliance Company (approx. 40 MINUTES)

1. Sales mix refers to the relative proportion of each product sold when a company sells more than one product.
2. (a) Yes. Plan A sales are expected to total 65,000 units (19,500 + 45,500), which compares favourably against current sales of 60,000 units.
- (b) Yes. Sales personnel earn a commission based on gross dollar sales. As the following figures show, Cold King sales will comprise a greater proportion of total sales under Plan A. This is not surprising in light of the fact that Cold King has a higher selling price than Mister Ice Cream (\$43 vs. \$37).

	Current		Plan A	
	Units	Sales Mix	Units	Sales Mix
Mister Ice Cream	21,000	35%	19,500	30%
Cold King	<u>39,000</u>	<u>65%</u>	<u>45,500</u>	<u>70%</u>
Total.....	<u>60,000</u>	<u>100%</u>	<u>65,000</u>	<u>100%</u>

- (c) Yes. Commissions will total \$267,800 (\$2,678,000 x 10%), which compares favourably against the current flat salaries of \$200,000.

Mister Ice Cream sales: 19,500 units x \$37	\$ 721,500
Cold King sales: 45,500 units x \$43	<u>1,956,500</u>
Total sales.....	<u>\$2,678,000</u>

- (d) No. The company would be less profitable under the new plan.

	Current	Plan A
Sales revenue:		
Mister Ice Cream: 21,000 units x \$37; 19,500 units x \$37	\$ 777,000	\$ 721,500
Cold King: 39,000 units x \$43; 45,500 units x \$43	<u>1,677,000</u>	<u>1,956,500</u>
Total revenue.....	<u>\$2,454,000</u>	<u>\$2,678,000</u>
Less variable cost:		
Mister Ice Cream: 21,000 units x \$20.50; 19,500 units x \$20.50.....	\$ 430,500	\$ 399,750
Cold King: 39,000 units x \$32.50; 45,500 units x \$32.50	<u>1,267,500</u>	1,478,750
Sales commissions (10% of sales revenue).....		<u>267,800</u>
Total variable cost.....	<u>\$1,698,000</u>	<u>\$2,146,300</u>
Contribution margin	\$ 756,000	\$ 531,700
Less fixed cost (salaries)	<u>200,000</u>	<u>----</u>
Net income	<u>\$ 556,000</u>	<u>\$ 531,700</u>

3. (a) The total units sold under both plans are the same; however, the sales mix has shifted under Plan B in favour of the more profitable product as judged by the contribution margin. Cold King has a contribution margin of \$10.50 (\$43.00 - \$32.50), and Mister Ice Cream has a contribution margin of \$16.50 (\$37.00 - \$20.50).

	Plan A		Plan B	
	Units	Sales Mix	Units	Sales Mix
Mister Ice Cream.....	19,500	30%	39,000	60%
Cold King	<u>45,500</u>	<u>70%</u>	<u>26,000</u>	<u>40%</u>
Total	<u>65,000</u>	<u>100%</u>	<u>65,000</u>	<u>100%</u>

- (b) Plan B is more attractive both to the sales force and to the company. Salespeople earn more money under this arrangement (\$274,950 vs. \$200,000), and the company is more profitable (\$641,550 vs. \$556,000).

	Current	Plan B
Sales revenue:		
Mister Ice Cream: 21,000 units x \$37; 39,000 units x \$37	\$ 777,000	\$1,443,000
Cold King: 39,000 units x \$43; 26,000 units x \$43.....	<u>1,677,000</u>	<u>1,118,000</u>
Total revenue	<u>\$2,454,000</u>	<u>\$2,561,000</u>
Less variable cost:		
Mister Ice Cream: 21,000 units x \$20.50; 39,000 units x \$20.50	\$ 430,500	\$ 799,500
Cold King: 39,000 units x \$32.50; 26,000 units x \$32.50.....	<u>1,267,500</u>	<u>845,000</u>
Total variable cost	<u>\$1,698,000</u>	<u>\$1,644,500</u>
Contribution margin.....	\$ 756,000	\$ 916,500
Less: Sales force compensation:		
Flat salaries	<u>200,000</u>	
Commissions (\$916,500 x 30%).....		<u>274,950</u>
Net income.....	<u>\$ 556,000</u>	<u>\$ 641,550</u>