

### Cost Problem

Taino Computers, Inc. makes a variety of computers. One of these products is a PC model: Yukiyu-XL. This model includes the ultimate in technology and is in strong demand. Expected demand for this year is 15,000 units. Full production capacity for Yukiyu-XL is 20,000 units, but 15,000 units are considered normal capacity. The following unit price and breakdown is applicable in 2018:

	Per unit
Sales Price	\$250.00
Less manufacturing costs:	
Materials	\$86.00
Direct Labor	\$30.00
Overhead: Variable	\$25.00
Fixed	\$20.00
Total manufacturing costs	\$161.00
Gross Margin	\$89.00
Less selling and administrative expenses:	
Selling: Variable	\$3.00
Fixed	\$20.00
Administrative, Fixed	\$15.00
MS Office, variable*	<b>\$23.00</b>
Total selling and administrative expenses	\$61.00
Net Profit before taxes	\$28.00

During May, the company received 2 special orders request from: Custco and Sums. These orders are not part of the budgeted 15,000 units sales of Yukiyu-XL for 2018, but there is sufficient capacity for possibly one order to be accepted. Orders received and their terms are:  
Order form Custco: 2,500 units at \$350 per unit with Office deluxe \$30 per unit.  
Order form Sums: 3,500 units at \$400 per unit with Office student \$23 per unit.

Since these orders were made directly to Taino Computers, Inc., no variable selling costs will be incurred.

1. Analyze the profitability of each of these two special orders.
2. Which special order should be accepted?
3. What other aspects need to be considered in addition to profitability?

**Value: 30 points**

**Due date: December 12, 2018**

**Analysis of the basic scenario and special orders**

	Per unit	Budget 2018 (15,000 units)	Custco's order, per unit	Sums' order, per unit	Budget 2018 (15,000 +2,500 units)	Budget 2018 (15,000 +3,500 units)
Sales Price	250.00	3,750,000	<b>350.00</b>	<b>400.00</b>	4,625,000	5,150,000
Less manufacturing costs:						
Materials	86.00	1,290,000	86.00	86.00	1,505,000	1,591,000
Direct Labor	30.00	450,000	30.00	30.00	525,000	555,000
Overhead: Variable	25.00	375,000	25.00	25.00	437,500	462,500
Fixed	20.00	300,000	17.14	16.22	300,000	300,000
Total manufacturing costs	161.00	2,415,000	158.14	157.22	2,767,500	2,908,500
Gross Margin	89.00	1,335,000	191.86	242.78	1,857,500	2,241,500
Less selling and administrative expenses:						
Selling: Variable	3.00	45,000			45,000	45,000
Fixed	20.00	300,000	17.14	16.22	300,000	300,000
Administrative, Fixed	15.00	225,000	12.86	12.16	225,000	225,000
MS Office, variable*	<b>23.00</b>	345,000	<b>30.00</b>	<b>23.00</b>	420,000	425,500
Total selling and administrative expenses	61.00	915,000	60.00	51.38	990,000	995,500
Net Profit before taxes	28.00	420,000	131.86	191.41	867,500	1,246,000

According to the calculations the most profitable order is the order from Sums. Together with the main order for 15,000 units it provides to Taino Computers, Inc., \$ 1,246,000 of Net Profit before taxes. Its profitability is due to the high price with constant variable costs and a decrease in unit fixed costs, which were taken into account in the calculation.

In order to accurately assess the profitability of the order, we have to know how fixed costs will change with changing of production. Perhaps, with an increase in production, their total amount will also increase.