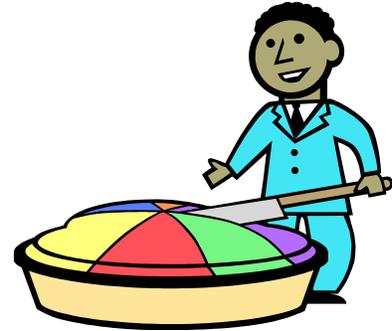


RELEVANT COSTS

Chapter 11. This is a hot topic of our day. Years ago accountants and others overlooked these ideas and made many ill decisions. When we are faced with making a decision there is often a lot of available data. The question is which data is relevant. There has been developed a set of three criteria which must be met in order to consider a particular topic or piece of information relevant to a decision. These criteria are...



Relevant Decision Criteria

- ① **It must be an item that is going to be expended or received in the future.**
- ② **It must differ between the alternatives you are considering.**
- ③ **It must be a cash flow item.**

All of these three things distinguish what is relevant from what is not relevant. If the information item does not have these three characteristics it is not relevant. Must be able to zero in on the relevant information.

In exhibit 11-2 (pg 380) the company is trying to decide whether or not they should reorganize the shop floor. The president asks two separate people to evaluate the decision. One guy wants to do a whole business analysis, what will the business look like if we reorg and what will it look like if we do not reorg. Launches a big study with marketing and operations to make this evaluation. The other guy says, “mmm, sounds like a manufacturing issue. Maybe I’ll go over and talk to the manufacturing supervisor”. Supervisor says yes, it’s his idea. Now the question is “What will change if we do this”.

Will direct material change? NO!

Will anything in marketing change? NO!

Will manufacturing overhead change? NO!

EXHIBIT 11-2 Determining Relevant Revenues and Relevant Costs for Precision Sporting Goods	All Revenues and Costs		Relevant Revenues and Costs	
	Alternative 1: Do Not Reorganize	Alternative 2: Reorganize	Alternative 1: Do Not Reorganize	Alternative 2: Reorganize
	Revenues ^a	\$6,250,000	\$6,250,000	—
Costs:				
Direct materials ^b	1,250,000	1,250,000	—	—
Manufacturing labor	640,000 ^c	480,000 ^d	\$ 640,000 ^c	\$ 480,000 ^d
Manufacturing overhead	750,000	750,000	—	—
Marketing	2,000,000	2,000,000	—	—
Reorganization costs	—	90,000	—	90,000
Total costs	4,640,000	4,570,000	640,000	570,000
Operating income	\$1,610,000	\$1,680,000	\$(640,000)	\$(570,000)
	\$70,000 Difference		\$70,000 Difference	
	^a 25,000 units × \$250 per unit = \$6,250,000		^c 20 workers × 2,000 hours per worker × \$16 per hour = \$640,000	
	^b 25,000 units × \$50 per unit = \$1,250,000		^d 15 workers × 2,000 hours per worker × \$16 per hour = \$480,000	

What will change? He learns that the change will save on labor time. The only thing which will change between reorg and not reorg is the labor costs. Predicts a savings of \$160,000 in the first year. But there is a one time cost of \$90,000 to move all the equipment around. This savings is a cash flow item, real money. This change in cash flow satisfies the third criteria and cash flow will differ between the alternatives so the second criteria is satisfied. And the decision is a future activity so the first criteria is satisfied.

We have zeroed in on the items relevant to this decision in only one conversation whereas the first guy is chasing people all over the plant.

This exhibit shows us that we can look at all revenues and costs or we can only look at what is relevant. This will make our analysis so much shorter and so much more precise and so much easier!

Sunk Costs

While we're talking about costs which are in the past... Sunk costs, for example, we are looking at a piece of equipment we bought 5 years ago. That's a sunk cost. Whether we over paid for it or whatever. It does not matter, it is not pertinent to a decision you are making now. Because the market changes and the market is what it is today. What are the alternatives? Either you buy or you do not. To consider a sunk event, an event you cannot change, in trying to make a future decision is irrelevant. It makes for a bad decision process. A sunk cost is a past event and is not relevant in future decision making. Always look forward. Do not consider depreciation. Depreciation results from a prior sunk cost. It's not a cash flow item, it is irrelevant. Consider the 3 criteria.

ONE TIME ONLY SPECIAL ORDER

In this case a business is in operation and doing moderately well. Consider the below exhibit.

EXHIBIT 11-4		A	B	C	D	
Budgeted Income Statement for August, Absorption-Costing Format for Surf Gear^a		1	Total	Per Unit		
		2	Units sold	<u>30,000</u>		
		3				
		4	Revenues	<u>\$600,000</u>	<u>\$20.00</u>	
		5	Cost of goods sold (manufacturing costs)			
		6	Variable manufacturing costs	225,000	7.50 ^b	
		7	Fixed manufacturing costs	135,000	4.50 ^c	
		8	Total cost of goods sold	<u>360,000</u>	<u>12.00</u>	
		9	Marketing costs			
		10	Variable marketing costs	150,000	5.00	
		11	Fixed marketing costs	60,000	2.00	
		12	Total marketing costs	<u>210,000</u>	<u>7.00</u>	
		13	Full costs of the product	<u>570,000</u>	<u>19.00</u>	
		14	Operating income	<u>\$ 30,000</u>	<u>\$ 1.00</u>	
15						
16	^a Surf Gear incurs no R&D, product-design, distribution or customer-service costs					
17	^b Variable manufacturing cost per unit	= Direct material cost per unit	+ Direct manufacturing labor cost per unit	+ Variable manufacturing overhead per unit		
18						
19		= \$6.00 + \$0.50 + \$1.00	=	\$7.50		
20	^c Fixed manufacturing cost per unit	= Fixed direct manufacturing labor cost per unit	+ Fixed manufacturing overhead per unit			
21						
22		= \$1.50 + \$3.00	=	\$4.50		

The business is selling 30,000 units and making a \$30,000 profit on the bottom line. Selling at \$20 per unit and the bottom line is only \$1 per unit. So the company is pretty close to the break even point. Now say a new customer walks in and makes a proposition. Ask for a one time run of a particular part at a low price. Much lower than the company can afford. So you turn him down. But then your financial guy comes over and says "Listen, you can do this. "

He explains that your fixed manufacturing costs are already paid for by the typical work load. Taking this order will only incur variable manufacturing costs. And, in addition, he came directly to the president, not the marketing people. So you're not going to incur any marketing costs, no commissions.

So what does this mean? It means that the company's only costs are \$7.50 and the company can make a margin of \$3.50 per unit times 5,000 units. That's greater than 50% increase in profitability! President thinks, wow, this is great! Let's do it!!!

So they accept the order and you look at the analysis: 5,000 units at \$11.00. What's going to change? (see the next exhibit).

	A	B	C	D	E	F	G	H	
1		Without the Special Order				With the Special Order		Difference:	
2		30,000				35,000		Relevant Amounts	
3		Units to be Sold				Units to be Sold		for the	
4		Per Unit	Total			Total		5,000	
5		(1)	(2) = (1) × 30,000			(3)		Units Special Order	
6	Revenues	\$20.00	\$600,000			\$655,000		\$55,000 ^a	
7	Variable costs:								
8	Manufacturing	7.50	225,000			262,500		37,500 ^b	
9	Marketing	5.00	150,000			150,000		0 ^c	
10	Total variable costs	12.50	375,000			412,500		37,500	
11	Contribution margin	7.50	225,000			242,500		17,500	
12	Fixed costs:								
13	Manufacturing	4.50	135,000			135,000		0 ^d	
14	Marketing	2.00	60,000			60,000		0 ^d	
15	Total fixed costs	6.50	195,000			195,000		0	
16	Operating income	\$ 1.00	\$ 30,000			\$ 47,500		\$17,500	
17									
18	^a 5,000 units × \$11.00 per unit = \$55,000.								
19	^b 5,000 units × \$7.50 per unit = \$37,500.								
20	^c No variable marketing costs would be incurred for the 5,000-unit one-time-only special order.								
21	^d Fixed manufacturing costs and fixed marketing costs would be unaffected by the special order.								

EXHIBIT 11-5
One-Time-Only Special-Order Decision for Surf Gear: Comparative Contribution Income Statements

Exhibit 11-5 illustrates two keys to analyzing relevant costs and relevant revenues for decisions: (1) distinguish relevant costs and revenues from irrelevant ones and (2) use the contribution income statement to focus on whether each variable cost and each fixed cost is affected by the alternatives under consideration.

What's going to change?

Revenue is going to go up by \$55,000.

Variable Manufacturing Costs will increase by $7.50 * 5,000 \text{ units} = \$37,500$

Subtract the change in revenue from the change in the variable manufacturing expense to find ...
 $55,000 - 37,500 = 17,500 \text{ Profit}$

On top of the company's \$30,000 profit from normal activities. That's a greater than 50% increase in profit.

This is an example of what is called **incremental pricing & costing**. Incremental pricing and costing assumes an already existing base for covering fixed expenses and only looks at the incremental or increased cost and increased price that you would get from a single order on top of that base.

This becomes an example of relevant thinking. The original manager (president) wasn't thinking relevantly. He wasn't thinking about how increases in volume only certain cost change even though he gets a lower price for the product he gets a profit increase because it's a cash flow item and it's a decision about future revenue and expense items, and it differs between the two alternatives whether I do or do not accept this order.

We can see in exhibit 11-5 that we have the original profit and loss of \$30,000 (?), we have an analysis which includes both the new order and the original base. But the relevant information is only in the last column and that column is the difference between the two alternatives. That's what's relevant.

Try to practice relevant thinking. But don't be too relevant, do not allow yourself to miss something else which is going to change. It is a valuable tool!

Now we don't want to be the kind of managers that only concerns ourselves with the numbers. We must also concern ourselves with the larger business picture. This happens way too many times. Yea, the numbers work in the above, but what are the downfalls of accepting the project at that price?

Downfalls to One Time only Special Orders

Negative impact on existing **customer base**.

Why? Everything has a down side and you must anticipate it and weight it against the up side because the downside may be of greater impact than the upside.

EXAM

Your existing customers are paying \$20 per unit. If they find out you've made a deal for \$7.50 a unit they will walk away. And their price is what is paying for your fixed costs.

Marketing may not like this idea either. This news is going to get out into the **marketplace**.

Competitors may also have a negative reaction. They will have to fight back fast. Once the market place gets wind that the price structure on this product has changed they will not want to go back to paying the old price. Once the marketplace demands something from you the competitors have to find a way to do it.

These three negative impacts can all result from our accepting a one time special order.

Still, people continue to do these types of things and even try to repeat the behavior.

MAKE OR BUY ANALYSIS

Consider exhibit 11-6 and the tabulation before it.

	Total Current Costs of Producing 1,000,000 Units in 2,500 Batches (1)	Current Cost per Unit (2) = (1) ÷ 1,000,000	Expected Total Costs of Producing 1,000,000 Units in 5,000 Batches Next Year (3)	Expected Cost per Unit (4) = (3) ÷ 1,000,000
Direct materials	\$ 9,000,000	\$ 9.00	\$ 9,000,000	\$ 9.00
Direct manufacturing labor	2,400,000	2.40	2,400,000	2.40
Variable manufacturing overhead costs of power and utilities	1,600,000	1.60	1,600,000	1.60
Mixed (variable and fixed) manufacturing overhead costs of materials handling and setup	1,750,000	1.75	2,000,000	2.00
Fixed manufacturing overhead costs of plant lease, insurance, and administration	3,000,000	3.00	3,000,000	3.00
Total manufacturing costs	<u>\$17,750,000</u>	<u>\$17.75</u>	<u>\$18,000,000</u>	<u>\$18.00</u>

In the tabulation before 11-6 they are looking at the costs of producing a million units. Right now it is costing them \$17.75 and they project that next year it will cost them \$18.00 per unit. Looking at that data only and making a comparison to the offer they received for \$16.00 to out source one might think this is a “no brainier”. But if we think about it, look a little deeper, to see if all of the costs that are included in that fully loaded \$18.00 meet the criteria for relevancy. What are the criteria? It has to be a cash cost, it has to differ between alternatives, and it has to be a future cash flow decision. Now we look at those 18.00 and find out direct material and direct labor do meet the criteria. Because here’s the only way you can do a make or buy decision: if you buy it your going to spend \$16.00 per unit, if you make it there are all sorts of costs which are included in your assessment of weather or not to do it – some of which will show a savings if the out source decision is made, but others which will not show a savings if the outsource decision is made. You will still keep spending that money. So what you really want to know is how does that \$16.00 check I’m about to write compare with how many checks I’m not going to write if I outsource? What are my real cash savings internally versus what my outflow is going to be externally? We had better be saving at least \$16.00 in real money internally before I decide to spend \$16.00 of real money externally. So lets take a look at these numbers.

Relevant Items	Total Relevant Costs		Relevant Cost Per Unit	
	Make	Buy	Make	Buy
Outside purchase of parts		\$16,000,000		\$16.00
Direct materials	\$ 9,000,000		\$ 9.00	
Direct manufacturing labor	2,400,000		2.40	
Variable manufacturing overhead	1,600,000		1.60	
Mixed (variable and fixed) materials-handling and setup overhead	2,000,000		2.00	
Total relevant costs^a	\$15,000,000	\$16,000,000	\$15.00	\$16.00
Difference in favor of making CD players	\$ 1,000,000		\$ 1.00	

EXHIBIT 11-6
Relevant (Incremental) Items for Make-or-Buy Decision for CD Players at Soho Company

^aThe \$3,000,000 of plant-lease, plant-insurance, and plant-administration costs could be included under both alternatives. Conceptually, they do not belong in a listing of relevant costs because these costs are irrelevant to the decision. Practically, some managers may want to include them in order to list all costs that will be incurred under each alternative.

Am I going to save on Direct Material? YES

Am I going to save on Direct Labor? YES

Will we save on Variable Overhead? YES

What about our mixed costs? Material Handling and Setup for instance. Makes sense, we will not be setting up the unit. And we are not going to be incurring the material handling costs during production but we will incur some material handling costs on this finished goods provided by the out source provider.

Fixed Overhead such as Plant Lease, Insurance, and Administration. Well out sourcing this one part is not going to change these costs. We will save nothing in these areas. All of these costs are not changing between the two alternatives and they are therefore irrelevant. Looking a exhibit 11-6 it turns out that yes, you do have to spend \$16.00 if you buy the out sourced part, now what do we save internally? Take that \$3.00 out (plant lease, insurance, and administration) we will only save \$15.00 internally. So basically what your doing is adding more costs to yourself on a relevant basis because your going to say \$15.00 of real money and spend \$16.00 of real money. That doesn't make any sense so the decision (in this case) would be NO WILL NOT OUTSOURCE, I WILL DO IT INTERNALLY. That's the right way to look at outsource decisions, what real money am I making versus what real money am I being asked to spend? Must be astute enough to pull out those kinds of costs which are not really relevant. And don't forget the potential of the out source company raising their price. A lot of companies are agreeing to a certain term with an out source company but requiring the out source firm to show a positive change of some percent per year (decrease costs). Also, in cases where the numbers are close people have to keep in mind the potential for misestimating, margin of error.

PRODUCT MIX DECISIONS UNDER CAPACITY CONSTRAINTS

Say we have two products that we are manufacturing. One is snowmobile engines and the other is a boat engine. Both products are profitable but there is a capacity constraint on machine hours for making these products (and it is not readily available to just add more machines). This is a real problem in a lot of small shops. This being the case we must figure out how to maximize profitability because we have a lot of fixed costs to overcome in order to make a profit. Consider the figure...

	Snowmobile Engine	Boat Engine
Selling price	\$800	\$1,000
Variable cost per unit	560	625
Contribution margin per unit	<u>\$240</u>	<u>\$ 375</u>
Contribution margin percentage ($\$240 \div \800 ; $\$375 \div \$1,000$)	30%	37.5%

If we were to look at the contribution margin ...

$$\text{Contribution Margin} = \text{Selling Price} - \text{Variable Costs}$$

Look at snow mobiles getting 800 and costing 560 with a contribution margin of \$240.

Boat engines drawing \$625 variable costs and giving a contribution margin of \$375.

We look at this and say, Wow, just maximize the production of boat engines. They make the higher margin. The more you make of that the more money you'll make. Right?

Only one little problem. There is resource consumption in the making of each of these which differs between snowmobile and boat engines.

The amount of scarce resource used (in this case is machine hours):

Snowmobile 2 Hours

Boat Engine 5 Hours

That's a lot of consumption of our scarce resource to get that contribution margin.

	Snowmobile Engine	Boat Engine
Contribution margin per unit	\$240	\$375
Machine-hours required to produce one unit	2 machine-hours	5 machine-hours
Contribution margin per machine-hour		
\$240 per unit ÷ 2 machine-hours/unit	\$120/machine-hour	
\$375 per unit ÷ 5 machine-hours/unit		\$75/machine-hour
Total contribution margin for 600 machine-hours		
\$120/machine-hour × 600 machine-hours	\$72,000	
\$75/machine-hour × 600 machine-hours		\$45,000

We really want to know is how much contribution margin there is per machine hour.

$$\text{Snowmobile} = \$240 / 2 = \$120 \text{ contribution margin per hour}$$

$$\text{Boat Engine} = \$375 / 5 = \$75 \text{ contribution margin per hour}$$

If our scarcest resource is machine hours we want to devote every hour to maximizing it's contribution margin possible. So we really want to maximize the production of snowmobile engines.

What is our maximum contribution margin? It is the contribution margin per unit of scarce resource times the number of hours of scarce resource you have available to you (600 hours in this case).

$$\text{Maximum Contribution Margin} = \$120 * 600 = \$72,000$$

This is the max we could get for contribution margin. Using boat engines would result in a much smaller number.

Now, does this meet the targets? Subtract the fixed costs to get the Maximum Operating Income.

$$\begin{aligned} \text{Max Optg Income} &= \text{Max Contribution Margin} - \text{Fixed Costs} \\ &= \$72,000 - 40,000 = \$32,000 \end{aligned}$$

It isn't always the case that you can, in a scarce resource situation, get enough contribution margin to overcome your fixed costs.

CUSTOMER RELEVANCY

When do we drop a customer? Page 394 exhibit 11-9 which stems from exhibit 11-8.

	Customer			Total
	Vogel	Brenner	Wisk	
Revenues	\$500,000	\$300,000	\$400,000	\$1,200,000
Cost of goods sold	370,000	220,000	330,000	920,000
Furniture-handling labor	41,000	18,000	33,000	92,000
Furniture-handling equipment cost written off as depreciation	12,000	4,000	9,000	25,000
Rent	14,000	8,000	14,000	36,000
Marketing support	11,000	9,000	10,000	30,000
Sales-order and delivery processing	13,000	7,000	12,000	32,000
General administration	20,000	12,000	16,000	48,000
Allocated corporate-office costs	10,000	8,000	8,000	24,000
Total costs	491,000	284,000	432,000	1,207,000
Operating income	\$ 9,000	\$ 16,000	\$(32,000)	\$ (7,000)

EXHIBIT 11-8
Customer Profitability
Analysis for Allied
West

Have 3 customers here. We are looking at customer profitability. Turns out that Wisk looks like it is causing this division to incur a loss of \$7,000 because it is so expensive to service. It's sales do not compensate for all the costs which are attributed to Wisk. Therefore, the managers are thinking if they drop Wisk they will have two profitable customers remaining and they can turn the division around from a \$7,000 loss to a \$25,000 profit.

EXHIBIT 11-9 Relevant-Revenue and Relevant-Cost Analysis for Dropping the Wisk Account and Adding the Loral Account	(Loss in Revenues) and Savings in Costs from Dropping Wisk Account (1)	Incremental Revenues and (Incremental Costs) from Adding Loral Account (2)
Revenues	\$(400,000)	\$400,000
Cost of goods sold	330,000	(330,000)
Furniture-handling labor	33,000	(33,000)
Furniture-handling equipment cost written off as depreciation	0	(9,000)
Rent	0	0
Marketing support	10,000	(10,000)
Sales-order and delivery processing	12,000	(12,000)
General administration	0	0
Corporate-office costs	0	0
Total costs	385,000	(394,000)
Effect on operating income (loss)	\$ (15,000)	\$ 5,000

 In making the decision to keep or drop the Wisk account, depreciation expense is not relevant because it is a sunk cost. Likewise, total costs that don't change are irrelevant—regardless of how they might be allocated.

Now lets look at which costs are really going to change if they drop this customer.

(What would be lost is in brackets, cash outflow or the loss of cash is bracketed. Savings are not bracketed.)

Dropping Wisk

Will lose the revenues:	(\$400,000)
Save Cost of Goods Sold:	\$330,000
Save Furniture Handling Labor:	\$33,000
Equipment depreciation write off (*):	No Savings
Rent:	No Savings
Marketing Support:	\$10,000 (this guy will not be needed)
Sales Order:	\$12,000
General Admin:	No Savings
Corporate Office Costs:	No Savings

We will save on all the items which show unbracketed amounts.

Now we look at the costs that are going to change versus the revenue that is going to change it turns out that the effect on operating income is a negative \$15,000. If we drop this customer we will loss \$15,000. What will this loss do to our overall profitability?

Present Profit:	(\$7,000)
Drop Wisk:	<u>(\$15,000)</u>
Projected Gain/Loss:	(\$22,000)

(*) We will not have this savings because
 1. the equipment was a sunk cost in the past and
 2. because depreciation is a non-cash cost
 However, any resale value of the equipment would be relevant.

Present Profit:	(\$7,000)
Drop Wisk:	(\$15,000)
Projected Gain/Loss:	(\$22,000)

So we see that the company stands to loss \$22,000 by dropping Wisk. This does not sound like a good idea. The company will be worst off if it makes this move. Because the cost which we are not going to save are simply going to be reallocated to the other divisions. For instance, we are still going to pay rent, the only difference is we now only have two customers amongst which it can be allocated.

This is how we look at the question of weather or not we keep a plant or weather or not we keep or close a subsidiary, keep a division or close a division, keep a product line or close a product line. We look at what things are going to change if we make that decision. Is it going to change for the better or worst.

All of the cost which are variable or direct to that product line or division will be changed in a manner which represent savings to the company. All of the revenue of a dropped division/product/customer will disappear (will be a negative number). What costs are we going to save? We will save everything which is dedicated to that product/division/customer, but anything which is allocated, anything which is non-cash, or anything that comes from the corporate office, or (most of the time) anything that's administrative will remain as an expense (will not save anything on these).

This is how we do relative thinking for this kind of project.

HOMEWORK

11-19

One time only, special order capacity: 10,000

7500 metals per month

Charge \$150 per metal

They have variable costs which vary with units or direct materials, or direct labor.

They also have variable costs per batches. A "batch" variable costs. That means, every time they run a batch of goods they incur this cost. So this cost is not on a per unit basis, it's on a per batch basis. And there are a certain number of units I each batch.

For example: if they run 150 batches through the current volume is 7500 units, they run them through in batches of, I think, 50 units. So every 50 units they incur this cost of \$500. Well for 7500 units that means their running through 150 batches (batch size of 50). So they take that 150 batches and they cost it out at \$500 per batch.

Then they have fixed manufacturing costs and marketing costs, that's their total cost structure.

They got a special order in for 2500 metals at \$100 per metal. If they accept it it would not effect the companies regular business (we have to assume this the first time out). They make the metals in batches of 50 now but the special order would require them to make the metals in 25

batches of 100 each. So in order to find your batch costs for the special order you'd take 25 batches and multiply by the 500 and that would give you your batch costs for this special order. They ask the question: should the company accept this special order? Figure what the impact would be of the special order.

- 1) Yes, we should estimate what the company's present profitability is.
- 2) Then, think relatively, and give a relative analysis of this special orders impact on profitability.

They ask two brain teasers.

Suppose plant capacity were only 9000 metals instead of 10,000 metals each month and the special order must be taken in full or rejected completely. Should they accept the special order. Solve by thinking relatively. Not necessarily a calculation based question. We already know what the value of the special order is. The question is, if they were constrained by capacity (they are already producing **7500** units). If their capacity were 9000 units that means they only have room for 1500 more units. This is a 2500 unit order. So if they were to accept this order what would they have to do? They would have to drop 1000 units of their existing customer base in order to accommodate this 2500 unit order. Because that's the only way they could fit it within 9000 units. Drop their existing customer base back to 6500 to make room for doing 2500 more units.

So we can recalculate 6500 units, or, we can figure out what the impact is of dropping 1000 base units and compare that with the impact of taking the special order. Because under this scenario taking the special order will have a value (which we already figured in number 1) what's the impact of dropping these other 1000 units.

3) Take in full or reject. Go back to a 10,000 unit capacity. They are concerned that if they accept the special order their existing customers will immediately demand a price discount of \$10 in the month in which the special order is being filled. The existing customers would argue that the companies capacity costs are now being spread over more units and that existing customers should get the benefit of these lower costs. Well, we could go back and figure, OK, lets see, 7500 units at 10 dollars... But instead think relatively. What's going to change if there is a 10 price adjustment on the existing base of customers.

Throughout this whole exercise the key is **THINK RELATIVELY**.

EXAM

11-23

Scarce resource problem. Making two units, a mod 9 and a mod 14. They give us a lot of costs but don't forget, we are after the contribution margin. We know how that's defined. Must come up with the contribution margin, not the operating margin. Then, the syllabus list additional information we will need to solve the problem.

In 11-23 - assume: Capacity=300,000 hrs, Model 9 = 20 hrs, Model 14 = 10 hrs,
Fixed costs=\$150,000; Which product should be maximized? What is Max Optg profit?)

Operating Profit is after deduction of your fixed costs. Work through to the operating profit line depending on which product you pick for maximizing the production. They can sell as much as either as they can make. Being able to sell is not an issue.

11-25

Looking at two stores, together they are currently making a profit of \$45,000 but it looks like the RI store is losing tones of money. Evaluate the given information at it's face and determine what the impact would be of dropping the RI store and also what the impact would be of dropping the CT store as well. What would the impact be of dropping either store (not both I assume). Ignore all comments made about what could and could not be. It says the equipment has a zero disposal value, that's good. Consider that.

Ignore all the "Maria Lopez" comments, that's shooting to a different point.

Just on the basis of the numbers tell him what I would do.

- 1) assess the impact of dropping CT or RI
- 2) What would the overall company profit be if you were to drop one or the other. Currently the overall company profit is \$45,000. What would it be if you dropped CT and what would it be if you dropped RI?