

Questions 1 and 2

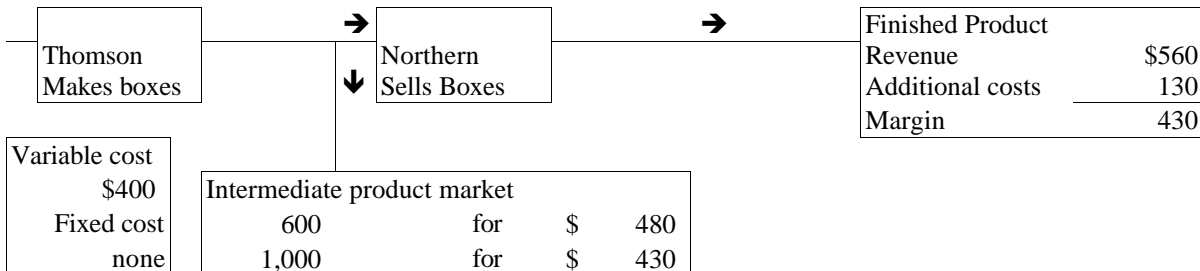
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Option 1		1,000 to Northern		
	Thomson		Northern	
Revenue			\$ 560	560,000
Variable cost	(\$400)	(400,000)	\$ (130)	(130,000)
Fixed cost		0		0
Profit		(400,000)		430,000
				<u>\$30,000</u>

Option 2		1,000 to market		
	Thomson			
Revenue	\$ 480	480,000		
Variable cost	(\$400)	(400,000)		
Fixed cost		0		
Profit		80,000		<u>\$80,000</u>

No transfers will take place as Northern will lose money. Even if the transfers are forced, the company will make less profit if no transfers are made
 If Thomson can really sell all the output at \$480 it is better for the company if it sells all the output to the market.

Hale Paper - A, Question 3



Option 3		400 to Northern		600 to market	
	Thomson		Northern	Thomson	
Revenue			\$ 560	480	288,000
Variable cost	(\$400)	(160,000)	\$ (130)	(\$400)	(240,000)
Fixed cost		0			0
Profit		(160,000)		<u>3</u>	48,000
Total company profits			172,000	Best	<u>60,000</u>

Thomson alone alternatives		600 to market		0 to market	
	1,000 to market				
Revenue	430	430,000	480	288,000	0
Variable cost	(\$400)	(400,000)	(\$400)	(240,000)	0
Fixed cost		0			0
Profit		30,000		48,000	0
Note		<u>2</u>		<u>5</u>	<u>4</u>

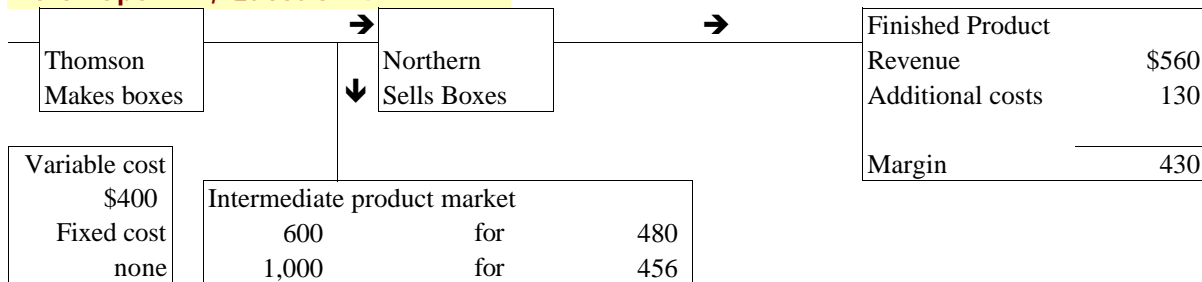
Minimum Transfer Price

Minimum transfer amount 400 units	= Additional incremental or outlay costs per unit incurred up to the point of transfer <u>a</u> \$160,000	+ Opportunity costs	Best Profit without transfer	Best Profit with transfer
			\$ 48,000	\$48,000

$$+ [\text{Best Profit without transfer} - \text{Best Profit with transfer}] = \$160,000$$

Minimum Transfer Price = \$160,000 ÷ 400 = **\$ 400**

Hale Paper - A, Question 4



The only different option for Thomson is 2:

Thomson alone alternatives

	1,000 to market	
Revenue	456	456,000
Variable cost	(\$400)	(400,000)
Fixed cost		0
Profit		56,000

Note 2

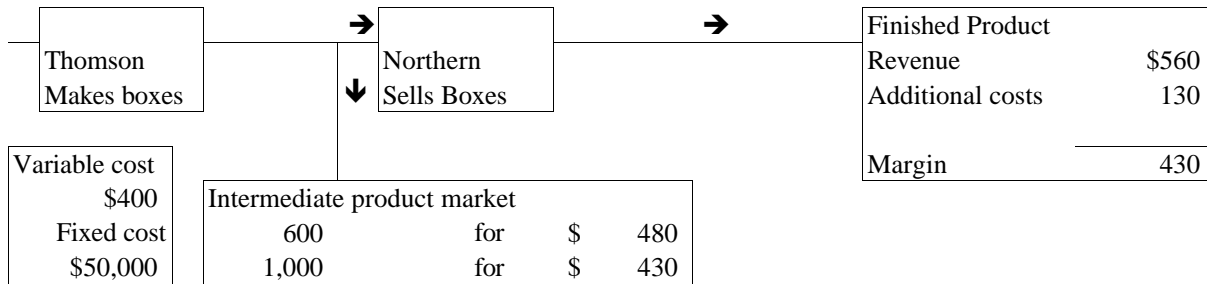
Minimum Transfer Price

Minimum transfer amount 400 units	= Additional incremental or outlay costs per unit incurred up to the point of transfer <u>a</u> \$160,000	+ Opportunity costs	Best Profit without transfer	Best Profit with transfer
			\$ 56,000	\$48,000

$$+ [\text{Best Profit without transfer} - \text{Best Profit with transfer}] = \$168,000$$

Minimum Transfer Price = \$168,000 ÷ 400 = **\$ 420**

Hale Paper - A, Question 5



Option 1	1,000 to Northern	
	Thomson	Northern
Revenue		\$ 560 560,000
Variable cost	(\$400) (400,000)	\$ (130) (130,000)
Fixed cost	(50,000)	0
Profit	(450,000)	430,000

(\$20,000)

Option 3	400 to Northern		600 0	
	Thomson	Northern	Thomson	
Revenue		\$ 560 224,000	480	288,000
Variable cost	(\$400) a (160,000)	\$ (130) (52,000)	(\$400)	(240,000)
Fixed cost	(20,000)			(30,000)
Profit	(180,000)	172,000	3	18,000

Total company profits **Best** 10,000

Thomson alone alternatives	1,000 to market		600 to market		0 to market	
Revenue	430	430,000	480	288,000	0	0
Variable cost	(\$400)	(400,000)	(\$400)	(240,000)	\$0	0
Fixed cost		(50,000)		(50,000)		
Profit		(20,000)		(2,000)		0

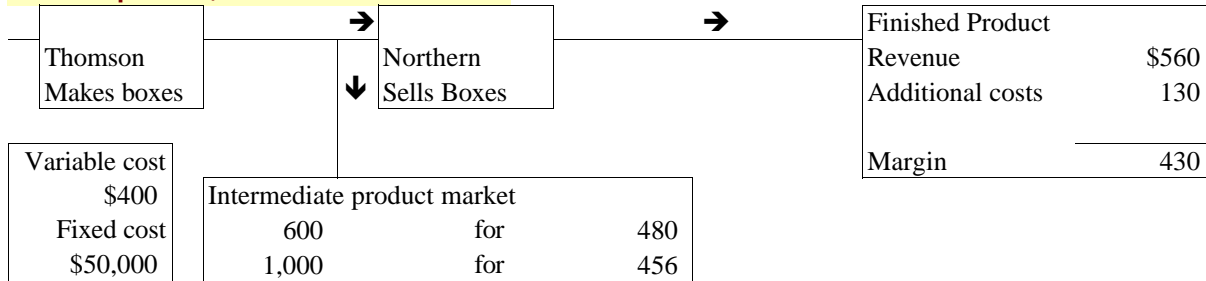
Note 2 5 4

Minimum Transfer Price

Minimum transfer amount	=	Additional incremental or outlay costs per unit incurred up to the point of transfer	+	Opportunity costs	
				Best Profit without transfer	Best Profit with transfer
400 units		a		4	3
		\$180,000	+[\$	- - \$18,000] = \$162,000

Minimum Transfer Price = \$162,000 ÷ 400 = **\$ 405**

Hale Paper - A, Question 6



Option 3 same as answer to Q3.

Thomson alone alternatives

	1,000 to market	600 to market	0 to market
Revenue	456	480	0
Variable cost	(\$400)	(\$400)	\$0
Fixed cost		(50,000)	
Profit	6,000	(2,000)	0
Note	<u>2</u>	<u>5</u>	<u>4</u>

Minimum Transfer Price

Minimum transfer amount 400 units	=	Additional incremental or outlay costs per unit incurred up to the point of transfer	+	Opportunity costs	
				Best Profit without transfer	Best Profit with transfer
	<u>a</u>			<u>2</u>	<u>3</u>
	\$180,000	+ [\$ 6,000	-	\$18,000] = \$168,000

Minimum Transfer Price = \$168,000 ÷ 400 = \$ 420

The Hale Paper Company - B

1. Boxes made by Thomson

		Southern	Northern
Thomson costs: Variable or opportunity			\$400
Liner board & other	50% x \$ 400 =	\$200	
Out of pocket costs: Southern	60% x \$ 200 =	\$120	
Hale Paper Company cash Saving		\$80	
Net Hale Paper Company cash outflow			\$320

2. Boxes from West Paper

		Southern	Thomson	Northern
Payment to Erie				372
Revenue from Erie		\$90		
Out of pocket costs: Southern	60% x \$90 =	\$54		
		\$36		
Revenue from Erie			\$30	
Out of pocket costs			\$25	
			\$5	
Net Hale Paper Company cash outflow		(36)	(5)	331

3. Boxes from Erie

345