#### Use cell references in your formulas instead of copying or copying values. DO NOT round decimal Excel results to whole units in ALL EXCEL CALCULATIONS!!!

#### Solved tasks

Corporation Garner Itd. sells three main product groups - robotic lawn mowers, small tractors and provides s

1. In item B. on the "Gardener" worksheet, prepare a unit costing for each type of product. Use a simple 2-st

2. Refine the calculation from item 1 by using a multi-stage allocation in which you first reallocate service

			Delivering centre		
			Rental	Canteen	
		All	ocation driver = m2	on driver = number of persons	
g		Sales	36.00 m2	15 persons	
ivin tre	tre	Rental	х	x	
ia);	uə) ∠	Canteen	17.00 m2	x	
Re		Management and adr	5.00 m2	5 persons	
			58.00 m2	20.00	

#### Separate task

Korporace Profi s.r.o. provides two types of consulting services - audit and tax consulting. A summary of its ci

- 3. On the sheet "Separately", prepare a costing for 1 hour of consulting services of Profi Ltd. Allocate the i
- 4. Refine the calculation from step 1 using a multi-stage allocation, first reallocating the costs of the servic

		supplier		
		Facility man.	IT	
			Cost driver - numer of	
		Cost driver = m2	connection points	
g er)	Facility	х	х	
vin	IT	50.00 m2	x	
isto	Operations	280.00 m2	70.00	
lcı re	Admin	100.00 m2	10.00	



ervice for both. age overhead rate allocation.

unit costs according to the following allocation keys:

osts for the past reporting period is summarized in the "Separate" sheet.

indirect costs using a one-step allocation.

ce units according to the following allocation keys:

# Gardener Itd.

## A. Basic data

	Lawn mowers
Sales volume	340 pcs
Number of offers made to prospective buyers	420
Average selling price	1,100 EUR/pc.
Costs:	
Cost of goods sold	269,229 EUR
Purchased services	x
Indirect costs of the "Sales" centre	x
Indirect costs of the "Rent" centre	x
Indirect costs of the "Canteen" centre	x
Indirect costs of the "Management and admin" centre	x

# B. Resulting costing with one-step allocation

	Lawn mowers (1 piece)
Direct costs	792 EUR/pc.
Indirect costs - "Sales"	73 EUR/pc.
Indirect costs - "Rent"	69.12 EUR/pc.
Indirect costs - "Cantina"	51 EUR/pc.
Indirect costs - "Management and admin"	59 EUR/pc.
Total indirect costs	252 EUR/pc.
Total costs	1,044 EUR/pc.
Profit	56 EUR/pc.
Selling price	1,100 EUR/pc.
ROS	5.1%
additional	
A. Indirect c. "Sales" by type of performance	374,000 EUR

### C. Step-down allocation (=reallocation) of costs and their resulting costi

### **Reallocation of INDIRECT COSTS:**

	Departmental indirect cost before allocation
Sales Rent	
Canteen	
Management and admin	
Sum	
	Lawn mowers (1 piece)
Direct costs	
Indirect costs - "Sales"	
Indirect costs - "Rent"	

Indirect costs - "Sales"
Indirect costs - "Rent"
Indirect costs - "Cantina"
Indirect costs - "Management and admin"
Total indirect costs
Total costs
Profit

Selling price ROS

Small tractors	Service	Total	
120 pcs	3,400 hours	X	
351	286	1057	
2,100 EUR/pc.	20 EUR/hour	Х	
		631,939 EUR	Allocation base
149,100 EUR	Х	418,329 EUR	pieces
x	38,110 EUR	38,110 EUR	hours
x	Х	62,750 EUR	number of offers made
x	Х	43,500 EUR	revenues
x	Х	32,250 EUR	revenues
x	Х	37,000 EUR	revenues

Small tractors (1 piece)	Service (1 hour)	Total	Notes
1,243 EUR/pc.	11.21 EUR/hour	456,439 EUR	
174 EUR/pc.	4.99 EUR/pc.	62,750 EUR	A. rate =
131.95 EUR/pc.	1.23 EUR/pc.	43,500 EUR	% rent =
98 EUR/pc.	0.91 EUR/hour	32,250 EUR	% canteen=
112 EUR/pc.	1.04 EUR/hour	37,000 EUR	% Admin=
516 EUR/pc.	8.17 EUR/hour	175,500 EUR	
1,758 EUR/pc.	19.38 EUR/hour	631,939 EUR	
342 EUR/pc.	0.12 EUR/hour	60,361 EUR	
2,100 EUR/pc.	19.50 EUR/hour	692,300 EUR	692300
16.3%	0.6%	8.7%	
252,000 EUR	66,300 EUR		

# ing per unit of output

ng per unit of output							
1st reallocation	Indirect cost	2nd reallocation	Indirect cost				
Service cost - Rent	after 1 st reallocation	Service cost Canteera	fter 2nd realoccation				
Small tractors (1 piece)	Service (1 hour)	Total	Notes				

	59.37 EUR/offer
6.28%	
4.66%	
5.34%	

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# Gardener Itd.

### A. Basic data

	Lawn mowers	Small tractors	Service
Sales volume	340 pcs	120 pcs	3,400 hours
Number of offers made to prospective buyers	420	351	286
Average selling price	1,100 EUR/pc.	2,100 EUR/pc.	20 EUR/hour
Costs:			
Cost of goods sold	269,229 EUR	149,100 EUR	Х
Purchased services	x	x	38,110 EUR
Indirect costs of the "Sales" centre	x	x	Х
Indirect costs of the "Rent" centre	x	x	Х
Indirect costs of the "Canteen" centre	x	x	Х
Indirect costs of the "Management and admin" centre	Х	X	Х

# B. Resulting costing with one-step allocation

	Lawn mowers (1	Small tractors (1	Service (1 hour)
	piece)	piece)	Service (Tribul)
Direct costs	791.85 EUR/pc.	1,242.50 EUR/pc.	11.21 EUR/pc.
Indirect costs - "Sales"	73.33 EUR/pc.	173.65 EUR/pc.	4.99 EUR/pc.
Indirect costs - "Rent"	69.12 EUR/pc.	131.95 EUR/pc.	1.23 EUR/pc.
Indirect costs - "Cantina"	51.24 EUR/pc.	97.83 EUR/pc.	0.91 EUR/pc.
Indirect costs - "Management and admin"	58.79 EUR/pc.	112.23 EUR/pc.	1.04 EUR/pc.
Total indirect costs	252.48 EUR/pc.	515.66 EUR/pc.	8.17 EUR/pc.
Total costs	1,044.33 EUR/pc.	1,758.16 EUR/pc.	19.38 EUR/pc.
Profit	55.67 EUR/pc.	341.84 EUR/pc.	0.12 EUR/pc.
Selling price	1,100.00 EUR/pc.	2,100.00 EUR/pc.	19.50 EUR/pc.
ROS	5.1%	16.3%	0.6%
additional			
A. Indirect c. "Sales" by type of performance	374,000 EUR	252,000 EUR	66,300 EUR

# C. Step-down allocation (=reallocation) of costs and their resulting costing per unit of output

Reallocation of INDIRECT COSTS:		1st reallocation	Indirect cost
	Departmental		
	indirect cost before	Service cost - Rent	after 1 st reallocation
	allocation		

	rate	750.00 EUR/m2	rate
Sum			
Management and admin	37,000.00 EUR	3,750.00 EUR	40,750.00 EUR
Canteen	32,250.00 EUR	12,750.00 EUR	45,000.00 EUR
Rent	43,500.00 EUR -	43,500.00 EUR	- EUR
Sales	62,750.00 EUR	27,000.00 EUR	89,750.00 EUR

	Lawn mowers (1	Small tractors (1	Service (1 hour)
	piece)	piece)	
Direct costs	791.85 EUR/pc.	1,242.50 EUR/pc.	11.21 EUR/pc.
Indirect costs - "Sales"	144.33 EUR/pc.	341.76 EUR/pc.	9.83 EUR/pc.
Indirect costs - "Rent"	0.00 EUR/pc.	0.00 EUR/pc.	0.00 EUR/pc.
Indirect costs - "Cantina"	0.00 EUR/pc.	0.00 EUR/pc.	0.00 EUR/pc.
Indirect costs - "Management and admin"	82.62 EUR/pc.	157.74 EUR/pc.	1.46 EUR/pc.
Total indirect costs	226.96 EUR/pc.	499.49 EUR/pc.	11.29 EUR/pc.
Total costs	1,018.81 EUR/pc.	1,741.99 EUR/pc.	22.50 EUR/pc.
Profit	81.19 EUR/pc.	358.01 EUR/pc.	-3.00 EUR/pc.
Selling price	1,100.00 EUR/pc.	2,100.00 EUR/pc.	19.50 EUR/pc.
ROS	7.4%	17.0%	-15.4%

Total	
X	
1057	
Х	
631,939 EUR	Allocation base
418,329 EUR	piece
38,110 EUR	hours
62,750 EUR	numer of offers made
43,500 EUR	revenues
32,250 EUR	revenues
37,000 EUR	revenues

Total		Notes	
456,439 EUR			
62,750 EUR		A. rate =	59.37 EUR/offer
43,500 EUR		% rent =	6.28%
32,250 EUR		% canteen=	4.66%
37,000 EUR		% Admin=	5.34%
175,500 EUR			
631,939 EUR			
60,361 EUR			
692,300 EUR			
	8.7%		

2nd reallocation Indirect cost

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Service cost Canteen after 2nd realoccation

Total	Notes	
456,439 EUR		
123,500.00 EUR	rate	116.84 EUR/offer
- EUR		
- EUR		
52,000.00 EUR	rate	7.51%
175,500.00 EUR		
631,939.00 EUR		
60,361.00 EUR		
692,300.00 EUR		
8.7%		

# Profi s.r.o.

## A. Basic data

	Audit
Total invoiced performance per month	1,280 hours
Selling price	63 EUR/hour
Direct costs	29 EUR/hour
Indirect costs	
Indirect costs of the 'Facilities Management' centre	Х
Indirect costs of the "IT" centre	Х
Indirect costs of the "Operations" centre	Х
Indirect costs of the "Admin" centre	х

### B. Resulting cost calculation with one-step allocation

sulting cost calculation with one-step allocation	
	Audit (1 hours.)
Direct costs	
Indirect costs - "Facilities Management"	
Indirect costs - "IT"	
Indirect costs - "Operations"	
Indirect costs - "Admin"	
Total indirect costs	
Total costs	
Profit	
Selling price	
ROS	

# C. Multi-stage allocation (=reallocation) of costs and their resulting c Reallocation of DIRECT COSTS:

	Primary indirect cost
Facility management	
IT	
Operations	
Admin	
Amount	
	Audit (1 hour)
Direct costs	
Indirect costs - "Facilities Management"	
Indirect costs - "IT"	
Indirect costs - "Operations"	
Indirect costs - "Admin"	
Total indirect costs	
Total costs	
Profit	
Selling price	
ROS	

Taxes	Total	_		
560 hours	1,840 hours			
75 EUR/hour	Х			
40 EUR/hour	Х			
		Allocation base		
x	6,000 EUR	direct costs		
x	16,500 EUR	direct costs		
x	21,500 EUR	invoiced hours		
x	140,000 EUR	Sales		
Total indirect cost	184,000 EUR			
Tax (1 hour.)	Total	Notes		
	4.0%			
	1.070			
osting per unit of ou	itout			
1st real stage	Indiract cost	2nd real stage	Indiract cost	
ist real stage	muneet cost	Zhu leai Stage		
Secondary - Facility	after 1st real.	Secondary - IT	after the 2nd real.	
Tax (1 hour)	Total	Note		