

This Excel worksheet relates to the Dickson Company example that is summarized in [Exhibit 2-5](#)

1. Award: 15.00 points

Download the Applying Excel form and enter formulas in all cells that contain question marks.

The Chapter 2 Form worksheet is to be used to create your own worksheet version of the example in the text.

Enter formulas in the cells that contain question marks. For example, in cell B25 enter the formula " $=B10$ ".

After entering formulas in all of the cells that contained question marks, verify that the amounts match the example in the text.

Check your worksheet by changing the total fixed manufacturing overhead cost for the Milling Department in the Data area to \$300,000, keeping all other data the same as in the original example. If your worksheet is operating properly, the total cost of Job 407 should now be \$2,350. If you do not get this answer, find the errors in your worksheet and correct them.

You should proceed to the requirements below only after completing your worksheet.

Save your completed Applying Excel form to your computer and then upload it here by clicking "Browse." Next, click "Save." You will use this worksheet to answer the questions in Part 2.

Garrison 16e Rechecks 2018-08-21

download reference file

Chapter_2_Applying_Excel_Student_Form.xlsx

upload a response file (15MB max) 

Browse... No file selected.

Save

References

File Attachment
Question

Learning Objective: 02-02
Apply overhead cost to
jobs using a
predetermined overhead
rate.

Learning Objective: 02-06 (Appendix 2B) Understand
the implications of basing the predetermined
overhead rate on activity at capacity rather than on
estimated activity for the period.

Difficulty: 2 Medium

Learning Objective: 02-03
Compute the total cost and
the unit product cost of a
job using a plantwide
predetermined overhead
rate.

Chapter 2: Applying Excel

Data

Markup on job cost

75%

Machine-hours
Direct labor-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour
Variable manufacturing overhead per direct labor-hour

Department	
Milling	Assembly
60,000	3,000
8,000	80,000
\$390,000	\$500,000
\$2.00	\$3.75

Cost summary for Job 407

Machine-hours
Direct labor-hours
Direct materials
Direct labor cost

Department	
Milling	Assembly
90	4
5	20
\$800	\$370
\$70	\$280

Enter a formula into each of the cells marked with a ? below

Step 1: Calculate the estimated total manufacturing overhead cost for each department

Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour or direct labor-hour
Total machine-hours or direct labor-hours
Total variable manufacturing overhead
Total manufacturing overhead

Milling	Assembly
?	?
?	?
?	?
?	?
?	?

Step 2: Calculate the predetermined overhead rate in each department

Total manufacturing overhead
Total machine-hours or direct labor-hours
Predetermined overhead rate per machine-hour or direct labor-hour

Milling	Assembly
?	?
?	?
?	?

Step 3: Calculate the amount of overhead applied from both departments to Job 407

Predetermined overhead rate per machine-hour or direct labor-hour
Machine-hours or direct labor-hours for the job
Manufacturing overhead applied

Milling	Assembly
?	?
?	?
?	?

Step 4: Calculate the total job cost for Job 407

Direct materials
Direct labor cost
Manufacturing overhead applied
Total cost of Job 407

Milling	Assembly	Total
?	?	?
?	?	?
?	?	?
		?

Step 5: Calculate the selling price for Job 407

Total cost of Job 407
Markup
Selling price of Job 407

?
?
?

Learning Objective:
02-01 Compute a
predetermined
overhead rate.

Learning Objective: 02-04
Compute the total cost and
the unit product cost of a
job using multiple
predetermined
overhead rates.

This Excel worksheet relates to the Dickson Company example that is summarized in [Exhibit 2-5](#)

2.

Award: 15.00 points

2. Change the total fixed manufacturing overhead cost for the Milling Department in Data area back to \$390,000, keeping all of the other data the same as in the original example. Consider a new job, Job 408, with the following characteristics:

	A	B	C
1	Chapter 2: Applying Excel		
2			
3	Cost summary for Job 408	Department	
4		Milling	Assembly
5	Machine-hours	90	3
6	Direct labor-hours	5	40
7	Direct materials cost	\$ 650	\$ 430
8	Direct labor cost	\$ 90	\$ 800

In your worksheet, enter this new data in the cells for Job 407.

What is the new selling price for Job 408? **(Round your final answer to 2 decimal places.)**

Selling price for Job 408	
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3. Without changing the data for the job from requirement 2 above, what is the selling price for Job 408 if the total number of machine-hours in the Assembly Department increases from 3,000

machine-hours to 5,000 machine-hours? **(Round your final answer to 2 decimal places.)**

Selling price for Job 408	
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4. Restore the total number of machine-hours in the Assembly Department to 3,000 machine-hours. And keep the job data the same as it was in Requirement 2. What is the selling price for Job 408 if the total number of direct labor-hours in the Assembly Department decreases from 80,000 direct labor-hours to 40,000 direct labor-hours? **(Round your final answer to 2 decimal places.)**

Selling price for Job 408	
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Garrison 16e Rechecks 2017-05-02; Garrison 16e Rechecks 2017-06-22, 2017-08-08, 2017-09-18, 2017-10-13, 2018-08-21

References

Applying Excel Question

Learning Objective: 02-02 Apply overhead cost to jobs using a predetermined overhead rate.

Learning Objective: 02-06 (Appendix 2B) Understand the implications of basing the predetermined overhead rate on activity at capacity rather than on estimated activity for the period.

Difficulty: 2 Medium

Learning Objective: 02-03 Compute the total cost and the unit product cost of a job using a plantwide predetermined overhead rate.

Learning Objective: 02-01 Compute a predetermined overhead rate.

Learning Objective: 02-04 Compute the total cost and the unit product cost of a job using multiple predetermined overhead rates.

3.

Award: 30.00 points

"Blast it!" said David Wilson, president of Teledex Company. "We've just lost the bid on the Koopers job by \$4,000. It seems we're either too high to get the job or too low to make any money on half the jobs we bid."

Teledex Company manufactures products to customers' specifications and uses a job-order costing system. The company uses a plantwide predetermined overhead rate based on direct labor cost to apply its manufacturing overhead (assumed to be all fixed) to jobs. The following estimates were made at the beginning of the year:

	Department			
	Fabricating	Machining	Assembly	Total Plant
Manufacturing overhead	\$ 383,250	\$ 438,000	\$ 98,550	\$ 919,800
Direct labor	\$ 219,000	\$ 109,500	\$ 328,500	\$ 657,000

Jobs require varying amounts of work in the three departments. The Koopers job, for example, would have required manufacturing costs in the three departments as follows:

	Department			
	Fabricating	Machining	Assembly	Total Plant
Direct materials	\$ 4,900	\$ 400	\$ 3,300	\$ 8,600
Direct labor	\$ 6,600	\$ 700	\$ 8,100	\$15,400
Manufacturing overhead	?	?	?	?

Required:

- Using the company's plantwide approach:
 - Compute the plantwide predetermined rate for the current year.
 - Determine the amount of manufacturing overhead cost that would have been applied to the Koopers job.
- Suppose that instead of using a plantwide predetermined overhead rate, the company had used departmental predetermined overhead rates based on direct labor cost. Under these conditions:
 - Compute the predetermined overhead rate for each department for the current year.
 - Determine the amount of manufacturing overhead cost that would have been applied to the Koopers job.
- Assume that it is customary in the industry to bid jobs at 150% of total manufacturing cost (direct materials, direct labor, and applied overhead).
 - What was the company's bid price on the Koopers job using a plantwide predetermined overhead rate?
 - What would the bid price have been if departmental predetermined overhead rates had been used to apply overhead cost?

Complete this question by entering your answers in the tabs below.

Required 1A	Required 1B	Required 2A	Required 2B	Required 4A	Required 4B
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Using the company's plantwide approach, compute the plantwide predetermined rate for the current year.

Predetermined overhead rate		% of direct labor cost
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< Required 1A

Required 1B >

Garrison 16e Rechecks 2017-08-08, 2018-08-21, 2018-09-27

References**Worksheet**

Learning Objective: 02-01
Compute a predetermined overhead rate.

Learning Objective: 02-03 Compute the total cost and the unit product cost of a job using a plantwide predetermined overhead rate.