

The Excel worksheet form that appears below is to be used to recreate part of the example relating to Turbo Crafters that appears earlier in the chapter.
Garrison 16e Rechecks 2017-08-04

1.

Award: 10.00 points

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

For example, in cell B13 enter the formula " $=B5$ ".

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

Check your worksheet by changing the estimated total amount of the allocation base in the Data area to 50,000 machine-hours, keeping all of the other data the same as in the original example. If your worksheet is operating properly, the predetermined overhead rate should now be \$6.00 per machine-hour. If you do not get this answer, find the errors in your worksheet and correct them.

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.

download reference file

Chapter_3_Applying_Excel_Student_Form.xls

upload a response file (15MB max) ?

Browse... No file selected.

Save

References

File Attachment
Question

Learning Objective: 03-01
Understand the flow of costs in a job-order costing system and prepare appropriate journal entries to record costs.

Difficulty: 2 Medium

Learning Objective: 03-04
Compute underapplied or overapplied overhead cost and prepare the journal entry to close the balance in Manufacturing Overhead to the appropriate accounts.

Chapter 3: Applying Excel

Data

Allocation base	Machine-hours
Estimated manufacturing overhead cost	\$300,000
Estimated total amount of the allocation base	75,000 machine-hours
Actual manufacturing overhead cost	\$290,000
Actual total amount of the allocation base	68,000 machine-hours

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

Computation of the predetermined overhead rate

Estimated manufacturing overhead cost	?
Estimated total amount of the allocation base	? machine-hours
Predetermined overhead rate	? per machine-hour

Computation of underapplied or overapplied manufacturing overhead

Actual manufacturing overhead cost	_____?
Manufacturing overhead cost applied to Work in Process during the year:	
Predetermined overhead rate	_____? per machine-hour
Actual total amount of the allocation base	_____? machine-hours
Manufacturing overhead applied	_____?
Underapplied (overapplied) manufacturing overhead	=====?

I only highlighted the areas to make sure each assignment was worked.

Copy of the excel

Sheet I will

attach the excel worksheet.

Please review carefully this homework has 6 questions, but they each have more than 1 part to complete. Please let me know, if you can complete the assignment.

Thank you
S

The Excel worksheet form that appears below is to be used to recreate part of the example relating to Turbo Crafters that appears earlier in the chapter.
Garrison 16e Rechecks 2017-08-04

2.

Award: 10.00 points

2. Change all of the numbers in the data area of your worksheet so that it looks like this:

	A	B	C
1	Chapter 3: Applying Excel		
2			
3	Data		
4	Allocation base	Machine-hours	
5	Estimated manufacturing overhead cost	\$ 365,800	
6	Estimated total amount of the allocation base	62,000	machine-hours
7	Actual manufacturing overhead cost	\$ 361,700	
8	Actual total amount of the allocation base	70,000	machine-hours

If your formulas are correct, you should get the correct answers to the following questions.

(a) What is the Predetermined overhead rate? (Round your answer to 2 decimal places.)

Predetermined overhead rate		per machine-hour
-----------------------------	--	------------------

(b) By how much is the manufacturing overhead underapplied or overapplied?

2 B
Answer →

	manufacturing overhead	
--	---------------------------	--

3. Either print or make a copy of your worksheet in your workbook before proceeding. You will need to refer back to this worksheet.

Change the estimated total amount of the allocation base to 59,000 machine-hours, but keep everything the same as in Requirement 2. The data area of your worksheet should now look like this:

	A	B	C
1	Chapter 3: Applying Excel		
2			
3	Data		
4	Allocation base	Machine-hours	
5	Estimated manufacturing overhead cost	\$ 365,800	
6	Estimated total amount of the allocation base	59,000	machine-hours
7	Actual manufacturing overhead cost	\$ 361,700	
8	Actual total amount of the allocation base	70,000	machine-hours

(a) By how much is the manufacturing overhead underapplied or overapplied?



	manufacturing overhead	
--	---------------------------	--

(b) Why is the amount of underapplied (overapplied) manufacturing overhead different from Requirement 2 above? (You may select more than one answer. Single click the box with the question mark to produce a check mark for a correct answers and double click the box with the question mark to empty the box for a wrong answers. Any boxes left with a question mark will be automatically graded as incorrect.)

- ☐ The change in the estimated total amount of the allocation base affected the predetermined overhead rate.
- ☐ The change in the estimated total amount of the allocation base affected the amount of manufacturing overhead applied.
- ☐ Actual manufacturing overhead cost differs from period to period.
- ☐ The estimated manufacturing overhead cost did not change in proportion to the change in the estimated total amount of the allocation base.

4. Change the estimated total amount of the allocation base back to 62,000 machine-hours, so that the data area of you worksheet looks exactly the same as in Requirement 2. Now change the actual manufacturing overhead cost from \$361,700 to \$370,300. The data area of your worksheet should now look like this:

	A	B	C
1	Chapter 3: Applying Excel		
2			
3	Data		
4	Allocation base	Machine-hours	
5	Estimated manufacturing overhead cost	\$ 365,800	
6	Estimated total amount of the allocation base	62,000	machine-hours
7	Actual manufacturing overhead cost	\$ 370,300	
8	Actual total amount of the allocation base	70,000	machine-hours



(a) By how much is the manufacturing overhead underapplied or overapplied?



	manufacturing overhead	
--	---------------------------	--

(b) Why is the amount of underapplied (overapplied) manufacturing overhead different from Requirement 2 above? (You may select more than one answer. Single click the box with the question mark to produce a check mark for a correct answers and double click the box with the question mark to empty the box for a wrong answers. Any boxes left with a question mark will be automatically graded as incorrect.)

- ☐ The predetermined overhead rate changed.
- ☐ The change in the actual manufacturing overhead cost directly resulted in a comparable change in the amount of underapplied (overapplied) manufacturing overhead.
- ☐ The change in the estimated total amount of the allocation base affected the amount of manufacturing overhead applied.

Garrison 16e Rechecks 2017-08-17, 2017-10-13

References

Applying Excel Question Learning Objective:
03-01 Understand the flow of costs in a job-order costing system and prepare appropriate journal entries to record costs.

Difficulty: 2 Medium Learning Objective:
03-04 Compute underapplied or overapplied overhead cost and prepare the journal entry to close the balance in Manufacturing Overhead to the appropriate accounts.

3.

Award: 10.00 points

Superior Company provided the following data for the year ended December 31 (all raw materials are used in production as direct materials):

Selling expenses	\$ 210,000
Purchases of raw materials	\$ 262,000
Direct labor	?
Administrative expenses	\$ 150,000
Manufacturing overhead applied to work in process	\$ 374,000
Actual manufacturing overhead cost	\$ 357,000

Inventory balances at the beginning and end of the year were as follows:

	Beginning of Year	End of Year
Raw materials	\$ 50,000	\$ 38,000
Work in process	?	\$ 29,000
Finished goods	\$ 40,000	?

The total manufacturing costs for the year were \$675,000; the cost of goods available for sale totaled \$725,000; the unadjusted cost of goods sold totaled \$663,000; and the net operating income was \$38,000. The company's underapplied or overapplied overhead is closed to Cost of Goods Sold.

Required:

Prepare schedules of cost of goods manufactured and cost of goods sold and an income statement. (Hint: Prepare the income statement and schedule of cost of goods sold first followed by the schedule of cost of goods manufactured.)

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

Income
StatementCOGS
ScheduleCOGM
Schedule

Prepare an income statement for the year.

Superior Company		
Income Statement		
Selling and administrative expenses:		

< Income Statement

COGS Schedule >

3.

Award: 10.00 points

Superior Company provided the following data for the year ended December 31 (all raw materials are used in production as direct materials):

Selling expenses	\$ 210,000
Purchases of raw materials	\$ 262,000
Direct labor	?
Administrative expenses	\$ 150,000
Manufacturing overhead applied to work in process	\$ 374,000
Actual manufacturing overhead cost	\$ 357,000

Inventory balances at the beginning and end of the year were as follows:

	Beginning of Year	End of Year
Raw materials	\$ 50,000	\$ 38,000
Work in process	?	\$ 29,000
Finished goods	\$ 40,000	?

The total manufacturing costs for the year were \$675,000; the cost of goods available for sale totaled \$725,000; the unadjusted cost of goods sold totaled \$663,000; and the net operating income was \$38,000. The company's underapplied or overapplied overhead is closed to Cost of Goods Sold.

Required:

Prepare schedules of cost of goods manufactured and cost of goods sold and an income statement. (Hint: Prepare the income statement and schedule of cost of goods sold first followed by the schedule of cost of goods manufactured.)

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

Income Statement	COGS Schedule	COGM Schedule
---------------------	------------------	------------------

Prepare a schedule of cost of goods sold.

Superior Company	
Schedule of Cost of Goods Sold	
Adjusted cost of goods sold	

< Income Statement

COGM Schedule >

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

Income Statement	COGS Schedule	COGM Schedule
------------------	---------------	---------------

Prepare a schedule of cost of goods manufactured.

Superior Company		
Schedule of Cost Goods Manufactured		
Direct materials:		
Total raw materials available		
Raw materials used in production		
Total manufacturing costs		
Cost of goods manufactured		

< COGS Schedule

COGM Schedule >

3rd Tab
to question 3

Garrison 16e Rechecks 2017-10-10
rev: 11_05_2018_QC_CS-146504

References

Worksheet

Difficulty: 2 Medium

Learning Objective: 03-03 Prepare schedules of cost of goods manufactured and cost of goods sold and an income statement.

4.

Award: 10.00 points

Osborn Manufacturing uses a predetermined overhead rate of \$19.60 per direct labor-hour. This predetermined rate was based on a cost formula that estimates \$262,640 of total manufacturing overhead for an estimated activity level of 13,400 direct labor-hours. The company actually incurred \$255,000 of manufacturing overhead and 12,900 direct labor-hours during the period.

Required:

1. Determine the amount of underapplied or overapplied manufacturing overhead for the period.
2. Assume that the company's underapplied or overapplied overhead is closed to Cost of Goods Sold. Would the journal entry to dispose of the underapplied or overapplied overhead increase or decrease the company's gross margin? By how much?

1.	Manufacturing overhead		by	
2.	The gross margin would		by	

HintsHint #1**References**

5.

Award: 10.00 points

The following cost data relate to the manufacturing activities of Chang Company during the just completed year:

Manufacturing overhead costs incurred:	
Indirect materials	\$ 16,200
Indirect labor	142,000
Property taxes, factory	9,200
Utilities, factory	82,000
Depreciation, factory	169,900
Insurance, factory	11,200
Total actual manufacturing overhead costs incurred	<u>\$ 430,500</u>
Other costs incurred:	
Purchases of raw materials (both direct and indirect)	\$ 412,000
Direct labor cost	\$ 72,000
Inventories:	
Raw materials, beginning	\$ 21,200
Raw materials, ending	\$ 31,200
Work in process, beginning	\$ 41,200
Work in process, ending	\$ 71,200

The company uses a predetermined overhead rate of \$21 per machine-hour to apply overhead cost to jobs. A total of 20,900 machine-hours were used during the year.

Required:

1. Compute the amount of underapplied or overapplied overhead cost for the year.
2. Prepare a schedule of cost of goods manufactured for the year.

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

Required 1

Required 2

Compute the amount of underapplied or overapplied overhead cost for the year.

overhead cost

< Required 1

Required 2 >

Garrison 16e Rechecks 2017-08-18
rev: 11_05_2018_QC_CS-146504

Hints

Hint #1

References

Question
5.
Par +
(2) →

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

Required 1

Required 2

Prepare a schedule of cost of goods manufactured for the year.

Chang Company		
Schedule of Cost of Goods Manufactured		
Direct materials:		
Total raw materials available		
Raw materials used in production		
Total manufacturing costs		
Cost of goods manufactured		

< Required 1

Required 2 >

Garrison 16e Rechecks 2017-08-18
rev: 11_05_2018_QC_CS-146504

Hints

Hint #1

References

Worksheet

Learning Objective: 03-03
Prepare schedules of cost of goods manufactured and cost of goods sold and an income statement.

Difficulty: 1 Easy

Learning Objective: 03-04
Compute underapplied or overapplied overhead cost and prepare the journal entry to close the balance in Manufacturing Overhead to the appropriate accounts.

2 of 2

6.

Award: 10.00 points

Dillon Products manufactures various machined parts to customer specifications. The company uses a job-order costing system and applies overhead cost to jobs on the basis of machine-hours. At the beginning of the year, the company used a cost formula to estimate that it would incur \$4,136,600 in manufacturing overhead cost at an activity level of 559,000 machine-hours.

The company spent the entire month of January working on a large order for 12,800 custom-made machined parts. The company had no work in process at the beginning of January. Cost data relating to January follow:

- a. Raw materials purchased on account, \$319,000.
- b. Raw materials used in production, \$251,000 (80% direct materials and 20% indirect materials).
- c. Labor cost accrued in the factory, \$162,000 (one-third direct labor and two-thirds indirect labor).
- d. Depreciation recorded on factory equipment, \$63,500.
- e. Other manufacturing overhead costs incurred on account, \$85,500.
- f. Manufacturing overhead cost was applied to production on the basis of 40,770 machine-hours actually worked during the month.
- g. The completed job for 12,800 custom-made machined parts was moved into the finished goods warehouse on January 31 to await delivery to the customer. (In computing the dollar amount for this entry, remember that the cost of a completed job consists of direct materials, direct labor, and *applied* overhead.)

Required:

1. Prepare journal entries to record items (a) through (f) above [ignore item (g) for the moment].
2. Prepare T-accounts for Manufacturing Overhead and Work in Process. Post the relevant items from your journal entries to these T-accounts.
3. Prepare a journal entry for item (g) above.
4. If 10,800 of the custom-made machined parts are shipped to the customer in February, how much of this job's cost will be included in cost of goods sold for February?

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

Required 1

Required 2

Required 3

Required 4

Prepare journal entries to record items (a) through (f) above [ignore item (g) for the moment]. (If no entry is required for a transaction/event, select "No journal entry required" in the first account field. Do not round intermediate calculations.)

[View transaction list](#)

Journal entry worksheet

<

1

2

3

4

5

6

>

Raw materials purchased on account, \$319,000.

Note: Enter debits before credits.

Transaction	General Journal	Debit	Credit
a.			

[Record entry](#)[Clear entry](#)[View general journal](#)

< Required 1

Required 2 >

Garrison 16e Rechecks 2017-08-18, 2017-10-09, 2017-10-26

Hints

[Hint #1](#)

References

General Journal

Learning Objective: 03-01
Understand the flow of costs in a job-order costing system and prepare appropriate journal entries to record costs.

Difficulty: 1 Easy

Learning Objective: 03-02 Use T-accounts to show the flow of costs in a job-order costing system.

6.

Award: 10.00 points

Dillon Products manufactures various machined parts to customer specifications. The company uses a job-order costing system and applies overhead cost to jobs on the basis of machine-hours. At the beginning of the year, the company used a cost formula to estimate that it would incur \$4,136,600 in manufacturing overhead cost at an activity level of 559,000 machine-hours.

The company spent the entire month of January working on a large order for 12,800 custom-made machined parts. The company had no work in process at the beginning of January. Cost data relating to January follow:

- Raw materials purchased on account, \$319,000.
- Raw materials used in production, \$251,000 (80% direct materials and 20% indirect materials).
- Labor cost accrued in the factory, \$162,000 (one-third direct labor and two-thirds indirect labor).
- Depreciation recorded on factory equipment, \$63,500.
- Other manufacturing overhead costs incurred on account, \$85,500.
- Manufacturing overhead cost was applied to production on the basis of 40,770 machine-hours actually worked during the month.
- The completed job for 12,800 custom-made machined parts was moved into the finished goods warehouse on January 31 to await delivery to the customer. (In computing the dollar amount for this entry, remember that the cost of a completed job consists of direct materials, direct labor, and applied overhead.)

Required:

- Prepare journal entries to record items (a) through (f) above [ignore item (g) for the moment].
- Prepare T-accounts for Manufacturing Overhead and Work in Process. Post the relevant items from your journal entries to these T-accounts.
- Prepare a journal entry for item (g) above.
- If 10,800 of the custom-made machined parts are shipped to the customer in February, how much of this job's cost will be included in cost of goods sold for February?

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

Required 1

Required 2

Required 3

Required 4

Prepare T-accounts for Manufacturing Overhead and Work in Process. Post the relevant items from your journal entries to these T-accounts.

Manufacturing Overhead				Work in Process			
End. Bal.				End. Bal.			

< Required 1

Required 3 >

Garrison 16e Rechecks 2017-08-18, 2017-10-09, 2017-10-26

Hints**Hint #1****References**

6.

Award: 10.00 points

Dillon Products manufactures various machined parts to customer specifications. The company uses a job-order costing system and applies overhead cost to jobs on the basis of machine-hours. At the beginning of the year, the company used a cost formula to estimate that it would incur \$4,136,600 in manufacturing overhead cost at an activity level of 559,000 machine-hours.

The company spent the entire month of January working on a large order for 12,800 custom-made machined parts. The company had no work in process at the beginning of January. Cost data relating to January follow:

- Raw materials purchased on account, \$319,000.
- Raw materials used in production, \$251,000 (80% direct materials and 20% indirect materials).
- Labor cost accrued in the factory, \$162,000 (one-third direct labor and two-thirds indirect labor).
- Depreciation recorded on factory equipment, \$63,500.
- Other manufacturing overhead costs incurred on account, \$85,500.
- Manufacturing overhead cost was applied to production on the basis of 40,770 machine-hours actually worked during the month.
- The completed job for 12,800 custom-made machined parts was moved into the finished goods warehouse on January 31 to await delivery to the customer. (In computing the dollar amount for this entry, remember that the cost of a completed job consists of direct materials, direct labor, and applied overhead.)

Required:

- Prepare journal entries to record items (a) through (f) above [ignore item (g) for the moment].
- Prepare T-accounts for Manufacturing Overhead and Work in Process. Post the relevant items from your journal entries to these T-accounts.
- Prepare a journal entry for item (g) above.
- If 10,800 of the custom-made machined parts are shipped to the customer in February, how much of this job's cost will be included in cost of goods sold for February?

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

Required 1

Required 2

Required 3

Required 4

Prepare a journal entry for item (g) above. (If no entry is required for a transaction/event, select "No journal entry required" in the first account field.)

View transaction list

Journal entry worksheet

<

1

>

Record the entry to transfer from WIP to Finished goods.

Note: Enter debits before credits.

Transaction	General Journal	Debit	Credit
g.			

Record entry

Clear entry

View general journal

< Required 2

Required 4 >

6.

Award: 10.00 points

Dillon Products manufactures various machined parts to customer specifications. The company uses a job-order costing system and applies overhead cost to jobs on the basis of machine-hours. At the beginning of the year, the company used a cost formula to estimate that it would incur \$4,136,600 in manufacturing overhead cost at an activity level of 559,000 machine-hours.

The company spent the entire month of January working on a large order for 12,800 custom-made machined parts. The company had no work in process at the beginning of January. Cost data relating to January follow:

- Raw materials purchased on account, \$319,000.
- Raw materials used in production, \$251,000 (80% direct materials and 20% indirect materials).
- Labor cost accrued in the factory, \$162,000 (one-third direct labor and two-thirds indirect labor).
- Depreciation recorded on factory equipment, \$63,500.
- Other manufacturing overhead costs incurred on account, \$85,500.
- Manufacturing overhead cost was applied to production on the basis of 40,770 machine-hours actually worked during the month.
- The completed job for 12,800 custom-made machined parts was moved into the finished goods warehouse on January 31 to await delivery to the customer. (In computing the dollar amount for this entry, remember that the cost of a completed job consists of direct materials, direct labor, and *applied* overhead.)

Required:

- Prepare journal entries to record items (a) through (f) above [ignore item (g) for the moment].
- Prepare T-accounts for Manufacturing Overhead and Work in Process. Post the relevant items from your journal entries to these T-accounts.
- Prepare a journal entry for item (g) above.
- If 10,800 of the custom-made machined parts are shipped to the customer in February, how much of this job's cost will be included in cost of goods sold for February?

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

Required 1

Required 2

Required 3

Required 4

If 10,800 of the custom-made machined parts are shipped to the customer in February, how much of this job's cost will be included in cost of goods sold for February? (Round your intermediate calculations to 2 decimal places and final answer to the nearest whole dollar amount.)

Portion of job cost included in cost of goods sold

< Required 3

Required 4 >

Garrison 16e Rechecks 2017-08-18, 2017-10-09, 2017-10-26

HintsHint #1**References****General Journal**

Learning Objective: 03-01
Understand the flow of costs in a job-order costing system and prepare appropriate journal entries to record costs.