Appendix 2A: Further Classification of Labor Costs

	Question Type	Difficulty	LO1: DM, DL, Manuf overhead	LO2: Period and product costs	LO3: Income statement	LO4: Schedule of cost of goods manufactured	LO5: Variable and fixed costs	LO6: Direct and indirect costs	LO7: Decision-making cost classifications	LO8: Labor cost classifications (App 2A)	LO9: Classification of quality costs (App2B)	LO10: Quality cost report (App 2B)	Professional Exam Adapted
1	T/F	E								x			
2	T/F	E								x			
3	Conceptual M/C	M								x			
4	M/C	M								x			
5	M/C	M								x			
6	M/C	M								x			
7-10	Multipart M/C	M								x			
11-14	Multipart M/C	M								x			
15	Problem	E								x			
16	Problem	E								x			
17	Problem	M								x			
18	Problem	M								x			

True / False Questions

1. The cost of fringe benefits given to direct labor workers is best classified as a period cost.
True False

2. Idle time for direct labor factory workers is classified as an indirect manufacturing cost.
True False

Multiple Choice Questions

3. The cost associated with idle time should be:
A. included as part of direct labor cost.
B. treated as part of manufacturing overhead.
C. added directly to cost of goods sold for the period.
D. included as part of selling and administrative expenses.

4. Bill Harris works on the assembly line of the Boothe Company and earns $10 per hour. He is paid time-and-a-half for work in excess of 40 hours per week. During a given week he worked 43 hours and had no idle time. How much of his week's wages would be charged to manufacturing overhead?
A. $15
B. $45
C. $30
D. $0

5. During the first week of April, Gillian worked a total of 50 hours and had no idle time. Gillian is paid $15 per hour for regular time, and is paid time-and-a-half for all hours in excess of a 40 hour week. The amount of Gillian's wages that should be charged to direct labor for the week is:
A. $600
B. $225
C. $750
D. $975

6. Robert Smith earns $6 per hour. For each hour over 40 he works, he is paid time-and-a-half. During a given week he worked 45 hours and had no idle time. How much of his weekly wages would be charged to the manufacturing overhead account?
A. $30
B. $45
C. $15
D. $0

Becky works on the assembly line of a manufacturing company where she installs a component part for one of the company's products. She is paid $16 per hour for regular time and time and a half for all work in excess of 40 hours per week.

7. Becky works 42 hours during a week in which there was no idle time. The allocation of Becky's wages for the week between direct labor cost and manufacturing overhead cost would be:

	Direct Labor	Manufacturing Overhead
A)	$664	$24
B)	$672	$16
C)	$640	$48
D)	$688	$0

A. Choice A
B. Choice B
C. Choice C
D. Choice D

8. Becky works 46 hours in a given week but is idle for 4 hours during the week due to equipment breakdowns. The allocation of Becky's wages for the week between direct labor cost and manufacturing overhead cost would be:

	Direct Labor	Manufacturing Overhead
A)	$640	$144
B)	$784	$0
C)	$736	$48
D)	$672	$112

A. Choice A
B. Choice B
C. Choice C
D. Choice D

9. Becky's employer offers fringe benefits that cost the company $3 for each hour of employee time (both regular and overtime). During a given week, Becky works 42 hours but is idle for 3 hours due to material shortages. The company treats all fringe benefits as part of manufacturing overhead. The allocation of Becky's wages and fringe benefits for the week between direct labor cost and manufacturing overhead would be:

	Direct Labor	Manufacturing Overhead
A)	$624	$190
B)	$640	$174
C)	$688	$126
D)	$672	$142

A. Choice A
B. Choice B
C. Choice C
D. Choice D

10. Becky's employer offers fringe benefits that cost the company $3 for each hour of employee time (both regular and overtime). During a given week, Becky works 42 hours but is idle for 3 hours due to material shortages. The company treats all fringe benefits relating to direct labor as added direct labor cost and the remainder as part of manufacturing overhead. The allocation of Becky's wages and fringe benefits for the week between direct labor cost and manufacturing overhead would be:

	Direct Labor	Manufacturing Overhead
A)	$624	$190
B)	$741	$73
C)	$688	$126
D)	$672	$142

A. Choice A
B. Choice B
C. Choice C
D. Choice D

Bob is a quality inspector on the assembly line of a manufacturing company. He is paid $16 per hour for regular time and time and a half for all work in excess of 40 hours per week. He is classified as a direct labor worker.

11. Bob works 44 hours during a week in which there was no idle time. The allocation of Bob's wages for the week between direct labor cost and manufacturing overhead cost would be:

	Direct Labor	Manufacturing Overhead
A)	$640	$96
B)	$688	$48
C)	$704	$32
D)	$736	$0

A. Choice A
B. Choice B
C. Choice C
D. Choice D

12. Bob works 48 hours in a given week but is idle for 4 hours during the week due to equipment breakdowns. The allocation of Bob's wages for the week between direct labor cost and manufacturing overhead cost would be:

	Direct Labor	Manufacturing Overhead
A)	$640	$192
B)	$704	$128
C)	$768	$64
D)	$832	$0

A. Choice A
B. Choice B
C. Choice C
D. Choice D

13. Bob's employer offers fringe benefits that cost the company $4 for each hour of employee time (both regular and overtime). During a given week, Bob works 45 hours but is idle for 2 hours due to material shortages. The company treats all fringe benefits as part of manufacturing overhead. The allocation of Bob's wages and fringe benefits for the week between direct labor cost and manufacturing overhead would be:

	Direct Labor	Manufacturing Overhead
A)	$720	$220
B)	$688	$252
C)	$760	$180
D)	$640	$300

A. Choice A
B. Choice B
C. Choice C
D. Choice D

14. Bob's employer offers fringe benefits that cost the company $4 for each hour of employee time (both regular and overtime). During a given week, Bob works 45 hours but is idle for 2 hours due to material shortages. The company treats all fringe benefits relating to direct labor as added direct labor cost and the remainder as part of manufacturing overhead. The allocation of Bob's wages and fringe benefits for the week between direct labor cost and manufacturing overhead would be:

	Direct Labor	Manufacturing Overhead
A)	$688	$252
B)	$760	$180
C)	$860	$80
D)	$720	$220

A. Choice A
B. Choice B
C. Choice C
D. Choice D

Essay Questions

15. A direct labor worker at Gallet Corporation is paid $20 per hour for regular time and time and a half for all work in excess of 40 hours per week. This employee works 44 hours during a week in which there was no idle time.

Required:

Determine how much of the worker's wages for the week would be classified as direct labor cost and how much would be classified as manufacturing overhead cost. Show your work.

16. A direct labor worker at Langill Corporation is paid $16 per hour for regular time and time and a half for all work in excess of 40 hours per week. This employee works 49 hours in a given week but is idle for 4 hours during the week due to equipment breakdowns.

Required:

Determine how much of the worker's wages for the week would be classified as direct labor cost and how much would be classified as manufacturing overhead cost. Show your work.

17. A direct labor worker at Santana Corporation is paid $22 per hour for regular time and time and a half for all work in excess of 40 hours per week. The company's fringe benefits cost $6 for each hour of employee time (both regular and overtime). Last week this employee worked 43 hours but was idle for 4 hours due to material shortages. The company treats all fringe benefits as part of manufacturing overhead.

Required:

Determine how much of the worker's wages for the week would be classified as direct labor cost and how much would be classified as manufacturing overhead cost. Show your work.

18. A direct labor worker at Vorwald Corporation is paid $14 per hour for regular time and time and a half for all work in excess of 40 hours per week. The company's fringe benefits cost $6 for each hour of employee time (both regular and overtime). Last week this employee worked 43 hours but was idle for 4 hours due to material shortages. The company treats all fringe benefits relating to direct labor as added direct labor cost and the remainder as part of manufacturing overhead.

Required:

Determine how much of the worker's wages for the week would be classified as direct labor cost and how much would be classified as manufacturing overhead cost. Show your work.

True / False Questions

1. The cost of fringe benefits given to direct labor workers is best classified as a period cost.
FALSE

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Easy

2. Idle time for direct labor factory workers is classified as an indirect manufacturing cost.
TRUE

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Easy

Multiple Choice Questions

3. The cost associated with idle time should be:
A. included as part of direct labor cost.
B. treated as part of manufacturing overhead.
C. added directly to cost of goods sold for the period.
D. included as part of selling and administrative expenses.

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

4. Bill Harris works on the assembly line of the Boothe Company and earns $10 per hour. He is paid time-and-a-half for work in excess of 40 hours per week. During a given week he worked 43 hours and had no idle time. How much of his week's wages would be charged to manufacturing overhead?

A. $15
B. $45
C. $30
D. $0

Overtime rate = $10 x 1.5 = $15 per hour
Manufacturing overhead = 3 hours x ($15 - $10) per hour = $15

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

5. During the first week of April, Gillian worked a total of 50 hours and had no idle time. Gillian is paid $15 per hour for regular time, and is paid time-and-a-half for all hours in excess of a 40 hour week. The amount of Gillian's wages that should be charged to direct labor for the week is:

A. $600
B. $225
C. $750
D. $975

Direct labor = 50 hours x $15 = $750

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

6. Robert Smith earns $6 per hour. For each hour over 40 he works, he is paid time-and-a-half. During a given week he worked 45 hours and had no idle time. How much of his weekly wages would be charged to the manufacturing overhead account?

A. $30
B. $45
C. $15
D. $0

Overtime rate = $6 x 1.5 = $9
Manufacturing overhead = 5 hours x ($9 - $6) = $15

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

Becky works on the assembly line of a manufacturing company where she installs a component part for one of the company's products. She is paid $16 per hour for regular time and time and a half for all work in excess of 40 hours per week.

7. Becky works 42 hours during a week in which there was no idle time. The allocation of Becky's wages for the week between direct labor cost and manufacturing overhead cost would be:

	Direct Labor	Manufacturing Overhead
A)	$664	$24
B)	$672	$16
C)	$640	$48
D)	$688	$0

A. Choice A
B. Choice B
C. Choice C
D. Choice D

Overtime rate = $16 × 1.5 = $24

Total wages for the week:	
Regular time: 40 hours × $16 per hour	$640
Overtime: 2 hours × $24 per hour......................	48
Total wages	$688
Allocation of total wages:	
Direct labor: 42 hours × $16 per hour................	$672
Manufacturing overhead:	
2 hours × ($24 − $16) per hour	16
Total wages	$688

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

8. Becky works 46 hours in a given week but is idle for 4 hours during the week due to equipment breakdowns. The allocation of Becky's wages for the week between direct labor cost and manufacturing overhead cost would be:

	Direct Labor	Manufacturing Overhead
A)	\$640	\$144
B)	\$784	\$0
C)	\$736	\$48
D)	\$672	\$112

A. Choice A
B. Choice B
C. Choice C
D. Choice D

Overtime rate = \$16 × 1.5 = \$24

Total wages for the week:	
Regular time: 40 hours × \$16 per hour	\$640
Overtime: 6 hours × \$24 per hour	144
Total wages	\$784
Allocation of total wages:	
Direct labor: 42 hours × \$16 per hour	\$672
Manufacturing overhead: (4 hours of idle time × \$16) + [6 hours of overtime × (\$24 − \$16)]	112
Total wages	\$784

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

9. Becky's employer offers fringe benefits that cost the company \$3 for each hour of employee time (both regular and overtime). During a given week, Becky works 42 hours but is idle for 3 hours due to material shortages. The company treats all fringe benefits as part of manufacturing overhead. The allocation of Becky's wages and fringe benefits for the week between direct labor cost and manufacturing overhead would be:

	Direct Labor	Manufacturing Overhead
A)	\$624	\$190
B)	\$640	\$174
C)	\$688	\$126
D)	\$672	\$142

A. Choice A
B. Choice B
C. Choice C
D. Choice D

Overtime rate = \$16 × 1.5 = \$24

Total wages for the week:		
Regular time: 40 hours × (\$16 + \$3) per hour		\$760
Overtime: 2 hours × (\$24 + \$3) per hour		54
Total wages		\$814
Allocation of total wages:		
Direct labor: 42 hours × \$16 per hour................		\$624
Manufacturing overhead:		
Fringe benefits: \$3 per hour × 42 hours	\$126	
Idle time: \$16 per hour × 3 hours....................	48	
Overtime: (\$24 − \$16 per hour) × 2 hours	16	190
Total wages		\$814

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

10. Becky's employer offers fringe benefits that cost the company $3 for each hour of employee time (both regular and overtime). During a given week, Becky works 42 hours but is idle for 3 hours due to material shortages. The company treats all fringe benefits relating to direct labor as added direct labor cost and the remainder as part of manufacturing overhead. The allocation of Becky's wages and fringe benefits for the week between direct labor cost and manufacturing overhead would be:

	Direct Labor	Manufacturing Overhead
A)	$624	$190
B)	$741	$73
C)	$688	$126
D)	$672	$142

A. Choice A
B. Choice B
C. Choice C
D. Choice D

Overtime rate = $16 × 1.5 = $24

Total wages for the week:	
Regular time: 40 hours × ($16 + $3) per hour	$760
Overtime: 2 hours × ($24 + $3) per hour	54
Total wages	$814
Allocation of total wages:	
Direct labor:	
(42 − 3 hours) × ($16 + $3 per hour)..............	$741
Manufacturing overhead: (3 hours of idle time × [$16 per hour + $3 per hour]) + (2 hours of overtime × $8 per hour).................................	73
Total wages	$814

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

Bob is a quality inspector on the assembly line of a manufacturing company. He is paid $16 per hour for regular time and time and a half for all work in excess of 40 hours per week. He is classified as a direct labor worker.

11. Bob works 44 hours during a week in which there was no idle time. The allocation of Bob's wages for the week between direct labor cost and manufacturing overhead cost would be:

	Direct Labor	Manufacturing Overhead
A)	$640	$96
B)	$688	$48
C)	$704	$32
D)	$736	$0

A. Choice A
B. Choice B
C. Choice C
D. Choice D

Overtime rate = $16 × 1.5 = $24

Total wages for the week:	
Regular time: 40 hours × $16 per hour	$640
Overtime: 4 hours × $24 per hour	96
Total wages	$736
Allocation of total wages:	
Direct labor: 44 hours × $16 per hour	$704
Manufacturing overhead:	
4 hours × ($24 – $16) per hour	32
Total wages	$736

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

12. Bob works 48 hours in a given week but is idle for 4 hours during the week due to equipment breakdowns. The allocation of Bob's wages for the week between direct labor cost and manufacturing overhead cost would be:

	Direct Labor	Manufacturing Overhead
A)	\$640	\$192
B)	\$704	\$128
C)	\$768	\$64
D)	\$832	\$0

A. Choice A
B. Choice B
C. Choice C
D. Choice D

Overtime rate = \$16 × 1.5 = \$24

Total wages for the week:	
Regular time: 40 hours × \$16 per hour	\$640
Overtime: 8 hours × \$24 per hour	192
Total wages	\$832
Allocation of total wages:	
Direct labor: 44 hours × \$16 per hour	\$704
Manufacturing overhead: (4 hours of idle time × \$16) + (8 hours of overtime × [\$24 – \$16])	128
Total wages	\$832

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

13. Bob's employer offers fringe benefits that cost the company $4 for each hour of employee time (both regular and overtime). During a given week, Bob works 45 hours but is idle for 2 hours due to material shortages. The company treats all fringe benefits as part of manufacturing overhead. The allocation of Bob's wages and fringe benefits for the week between direct labor cost and manufacturing overhead would be:

	Direct Labor	Manufacturing Overhead
A)	$720	$220
B)	$688	$252
C)	$760	$180
D)	$640	$300

A. Choice A
B. Choice B
C. Choice C
D. Choice D

Overtime rate = $16 × 1.5 = $24

Total wages for the week:		
Regular time: 40 hours × ($16 + $4) per hour		$800
Overtime: 5 hours × ($24 + $4) per hour		140
Total wages		$940
Allocation of total wages:		
Direct labor:		
([45 hours – 2 hours] × $16 per hour)		$688
Manufacturing overhead:		
Fringe benefits: $4 per hour × 45 hours	$180	
Idle time: $16 per hour × 2 hours	32	
Overtime:		
($24 per hour – $16 per hour) × 5 hours	40	252
Total wages		$940

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

14. Bob's employer offers fringe benefits that cost the company $4 for each hour of employee time (both regular and overtime). During a given week, Bob works 45 hours but is idle for 2 hours due to material shortages. The company treats all fringe benefits relating to direct labor as added direct labor cost and the remainder as part of manufacturing overhead. The allocation of Bob's wages and fringe benefits for the week between direct labor cost and manufacturing overhead would be:

	Direct Labor	Manufacturing Overhead
A)	$688	$252
B)	$760	$180
C)	$860	$80
D)	$720	$220

A. Choice A
B. Choice B
C. Choice C
D. Choice D

Overtime rate = $16 × 1.5 = $24

Total wages for the week:	
Regular time: 40 hours × ($16 + $4) per hour	$800
Overtime: 5 hours × ($24 + $4) per hour	140
Total wages	$940
Allocation of total wages:	
Direct labor:	
(45 hours – 2 hours) × ($16 + $4) per hour	$860
Manufacturing overhead: (2 hours of idle time × [$16 per hour + $4 per hour]) + (5 hours of overtime × $8 per hour)	80
Total wages	$940

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

Essay Questions

15. A direct labor worker at Gallet Corporation is paid $20 per hour for regular time and time and a half for all work in excess of 40 hours per week. This employee works 44 hours during a week in which there was no idle time.

Required:

Determine how much of the worker's wages for the week would be classified as direct labor cost and how much would be classified as manufacturing overhead cost. Show your work.

Direct labor:	
$20 per hour × 44 hours	$880
Manufacturing overhead:	
Overtime premium: $10 per hour × 4 hours	$40

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Easy

16. A direct labor worker at Langill Corporation is paid $16 per hour for regular time and time and a half for all work in excess of 40 hours per week. This employee works 49 hours in a given week but is idle for 4 hours during the week due to equipment breakdowns.

Required:

Determine how much of the worker's wages for the week would be classified as direct labor cost and how much would be classified as manufacturing overhead cost. Show your work.

Direct labor:	
$16 per hour × 45 hours	$720
Manufacturing overhead:	
Idle time: $16 per hour × 4 hours	$64
Overtime premium: $8 per hour × 9 hours	72
Total manufacturing overhead	$136

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Easy

17. A direct labor worker at Santana Corporation is paid $22 per hour for regular time and time and a half for all work in excess of 40 hours per week. The company's fringe benefits cost $6 for each hour of employee time (both regular and overtime). Last week this employee worked 43 hours but was idle for 4 hours due to material shortages. The company treats all fringe benefits as part of manufacturing overhead.

Required:

Determine how much of the worker's wages for the week would be classified as direct labor cost and how much would be classified as manufacturing overhead cost. Show your work.

Direct labor:	
$22 per hour × 39 hours	$858
Manufacturing overhead:	
Idle time: $22 per hour × 4 hours	$88
Overtime premium: $11 per hour × 3 hours	33
Fringe benefits: $6 per hour × 43 hours	258
Total manufacturing overhead	$379

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium

18. A direct labor worker at Vorwald Corporation is paid $14 per hour for regular time and time and a half for all work in excess of 40 hours per week. The company's fringe benefits cost $6 for each hour of employee time (both regular and overtime). Last week this employee worked 43 hours but was idle for 4 hours due to material shortages. The company treats all fringe benefits relating to direct labor as added direct labor cost and the remainder as part of manufacturing overhead.

Required:

Determine how much of the worker's wages for the week would be classified as direct labor cost and how much would be classified as manufacturing overhead cost. Show your work.

Direct labor:	
Wages: $14 per hour × 39 hours	$546
Fringe benefits: $6 per hour ×39 hours	234
Total direct labor	$780
Manufacturing overhead:	
Idle time: $14 per hour ×4 hours	$56
Overtime premium: $7 per hour × 3 hours	21
Fringe benefits: $6 per hour × 4 hours	24
Total manufacturing overhead	$101

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Learning Objective: 8
Level: Medium