

Name: Solution

This exam contains 25 questions. Be sure to fill in an answer on your scantron for each question. Good luck!

1. Britton Industries has budgeted the following information for March:

Cash receipts	\$542,000
Beginning cash balance	\$ 10,000
Cash payments	\$560,000
Desired ending cash balance	\$ 50,000

If there is a cash shortage, the company borrows money from the bank. All cash is borrowed at the beginning of the month in \$1,000 increments and interest is paid monthly at 1% on the first day of the following month. The company had no debt before March 1st. How much interest would the company have to pay in April (the following month)?

- a. \$ -0-
- b. \$ 80
- c. \$500
- d. \$580**
- e. None of the above.

Begin \$10,000
 + receipts 542,000
 - pymts 560,000
 shortage (\$8,000)

Borrow:
 needed end \$50,000
 + shortage 8,000
 \$58,000
 x 1%
 \$ 580

2. ServicePro provides two kinds of services. During the most recent accounting period, the two service lines produced the following operating results:

	Service 1	Service 2
Service revenue	\$80,000	\$20,000
Unit-level materials	(\$20,000)	(\$ 2,000)
Unit-level labor	(\$30,000)	(\$14,000)
Product-level selling & administrative costs	(\$10,000)	(\$ 2,500)
Company wide facility-level costs	(\$ 5,000)	(\$ 5,000)
Net income	\$15,000	(\$ 3,500)

Current Total vs. only Service 1
 \$11,500 vs. \$1
 s \$80
 DM < 20 >
 DL < 30 >
 Prod < 10 >
 Facility costs < 10 >
 \$10,000

If the company stops providing Service 2,

- a. The company's income will increase by \$1,500 per year.
- b. The company's income will decrease by \$1,500 per year.**
- c. The company's income will increase by \$3,500 per year.
- d. The company's income will decrease by \$3,500 per year.
- e. None of the above

→ from \$11,500 to \$10,000

3. Select the correct statement regarding relevant costs and revenues.

- a. Sunk costs are relevant for decision-making purposes. **NO**
- b. Differential revenues are expected future revenues that do not vary between the alternatives under consideration. **NO**
- c. Avoidable costs are also known as sunk costs. **NO**
- d. To be relevant, a cost revenue must be future-oriented and must differ between the alternatives. STANDARD TEXTBOOK DEFINITION.**
- e. To become relevant, costs and revenues must first go through a short stage of being irrelevant. **NO**

4. In the early days of the industrial revolution, indirect manufacturing costs
- Were highly correlated with the use of labor. **YES**
 - Were relatively large compared to the direct costs of producing a product. **NO**
 - Were a significant cost of producing most products. **NO**
 - All of the above **NO**
 - None of the above **NO**

5. Crow Company expects the following total sales:

Month	Sales
March	\$30,000
April	\$20,000
May	\$30,000
June	\$25,000

Receipts ON

CASH SALES	Credit SALES
\$ 9,000 ^①	(14,000 × 72%) ^②
	(21,000 × 25%) ^③

The company expects 70% of its sales to be credit sales and 30% to be cash. Credit sales are collected as follows: 25% in the month of sale, 72% in the month following the sale with the remainder being uncollectible and written off in the month following the sale. The budgeted cash collection during May is:

- \$14,350
- \$15,750
- \$24,330**
- \$26,580
- None of the above.

\$ 9,000 ^①
 + 10,080 ^②
 + 5,250 ^③
 \$ 24,330

6. The following information is provided for two products:

	Product X	Product Y
Selling price per unit	\$25	\$35
Variable cost per unit	15	20

	x	y			
CM per unit	10	15			
# of units on shelf space	8,000	6,000			
Profit	80,000	90,000			

Assume the products will be sold in a store where shelf space is a scarce resource and there is sufficient room for only one of the two products. Expected sales for Product X are 8,000 units, and expected sales for Product Y are 6,000 units. Which product should be sold and why?

- Product X should be sold solely because expected demand is greater. **NO**
 - Product X should be sold in order to maximize profit. **NO**
 - They say to always guess "C" if you don't know the answer. **NO**
 - Product Y should be sold in order to maximize profit. YES**
 - Product Y should be sold because it provides a greater contribution margin per unit *while true, this isn't the reason to pick Product Y*
7. Which of the following budgets needs to be prepared prior to preparing a purchases budget?
- Sales budget** *Everything starts w/ SALES*
 - Selling and administrative expense budget **NO** (somewhat unrelated)
 - Cash budget **NO** (typically comes AFTER determining purchase needs)
 - All of the above **X**
 - None of the above **X**

8. Homer Company expects credit sales for January to be \$50,000. Cash sales are expected to be \$30,000. The company expects credit and cash sales to increase 10% for the month of February. Credit sales are collected in the month following the month in which sales are made. Based on this information the amount of cash collections in February would be:

- \$88,000
- \$80,000
- \$85,000
- \$83,000**
- None of the above

Feb receipts

CASH FROM JAN. CREDIT SALES = \$ 50,000
 expected cash sales (30,000 × 1.1) = \$ 33,000
 \$ 83,000

9. Sarasota Company created a budget for the first four months of 2007. Projected credit sales are shown below:

January	\$30,000
February	\$36,000
March	\$45,000
April	\$48,000

$$\times 65\% = \underline{\underline{\$ 29,250}}$$

Past experience show collection of credit sales as follows: 35% in the month of sale and 65% in the month following the month of sale.

What is the expected accounts receivable balance at the end of the first quarter (i.e., What is the expected A/R balance on March 31, 2007?)

- a. \$ 29,250
 b. \$ 33,300
 c. \$ 35,850
 d. \$ 36,900
 e. None of the above
10. Clear Music company produces and sells a desktop speaker for \$100. The company has the capacity to produce 50,000 speakers each period. At capacity, the costs assigned to each unit are as follows:

Unit level costs	\$45
Product level costs	\$15
Facility level costs	\$ 5

$\rightarrow 45 \times 1,000 \text{ speakers} = \$45,000 \text{ incremental cost}$
 > Product & Facility costs will not change if the special order is Accepted.

The Company has received a special order for 1,000 speakers. If this order is accepted, the company will have to spend \$10,000 on one-time packaging costs. Assume that no sales to regular customers will be lost if the order is accepted.

At what selling price will the company be indifferent between accepting and rejecting the special order?

- a. \$100
 b. \$55
 c. \$45
 d. \$65
 e. None of the above

$$(1,000 \text{ units} \cdot \text{Price}) - \$45,000 \text{ incremental cost} - \$10,000 \text{ one-time packing} = 0$$

$$\text{Price} = \$55$$

11. S. H. Woods Company developed the following budget at the beginning of the company's accounting period:

Revenue (8,000 units)	\$16,000
Variable costs	4,000
Contribution margin	\$12,000
Fixed costs	4,000
Net income	\$8,000

$$\div 8,000 \text{ units} = \$1.50 \text{ per unit}$$

If actual production totals 7,800 units, what amount of net income would the flexible budget show?

- a. \$ 7,600
 b. \$ 7,700
 c. \$ 7,800
 d. \$ 8,000
 e. None of the above.

$$\begin{array}{r} \$1.50 \text{ CM per unit} \\ \times 7,800 \text{ units} \\ \hline 11,700 \text{ Total CM} \\ - 4,000 \text{ FC} \\ \hline \underline{\underline{\$ 7,700}} \text{ Net Income} \end{array}$$

12. Connor Sporting Goods produces two types of shoes, football and basketball. The company uses the same facility to make both products even though the processes are quite different. The company has recently converted its cost accounting system to activity-based costing. The following are the cost data that Sue Chapman, the cost accountant, prepared for the fourth quarter of 2007 (during which Connor made 30,000 pairs of football shoes and 15,000 pairs of basketball shoes).

Direct Cost	Football Shoes (FS)	Basketball Shoes (BS)
Direct Materials	\$15 per unit	\$12 per unit
Direct Labor	\$20 per unit	\$18 per unit

Activity Pool	Cost Pool	Total Cost Driver	Amount of Cost Driver
Unit level	\$391,500	# of inspection hrs	FS: 7,500 hrs; BS: 6,000 hrs
Batch level	\$137,500	# of setups	FS: 40 setups; BS: 22.5 set ups
Product level	\$54,000	# of TV commercials	FS: 3; BS: 1
Facility level	\$352,000	# of machine hours	FS: 15,500 hrs; BS: 16,500

Football's % use
 $\frac{55.5\%}{64\%}$
 $\frac{75\%}{48.4\%}$

What is the total production cost for the fourth quarter for the football shoes? (Round to the nearest dollar.)

- \$750,000
- \$516,500
- \$1,266,500
- \$1,373,333
- None of the above

$$DM + DL + OH = \text{Total Product Cost}$$

$$(\$15 + \$20) \times 30,000 \text{ units} = \$1,050,000 \text{ in DM \& DL}$$

OH: multiply each cost pool by % use

$$(\$217,500 + 88,000 + 40,500 + 170,500) = 516,500$$

13. Owl Company is in the process of preparing a purchases budget for the first quarter of 2008. The company has budgeted sales as follows:

December, 2007	\$ 88,000
January, 2008	\$ 93,000
February, 2008	\$102,000
March, 2008	\$123,000

COGS (75% of sales)

69,750
76,500

\$ 1,566,500

Cost of goods sold is expected to be 75% of sales. The company would like to have ending inventory each month equal to 25% of the following month's predicted cost of sales. The total cost of purchases in January is

- \$118,500
- \$ 93,000
- \$ 88,876
- \$ 71,438
- None of the above

JAN INU	
Begin 17,438	
Purchase	69,750 COGS
End 19,125	

-OR-

Equation

$$\begin{array}{r} \text{Begin INU } 17,438 \\ + \text{ Purchases } \quad \times \\ - \text{ COGS } \quad 69,750 \\ \hline \text{End INU } 19,125 \end{array}$$

14. Moore Company allocates overhead on the basis of direct labor hours. It allocates overhead costs of \$6,400 to two different jobs as follows:

Job 1: (10 hours) \$3,200 Job 2: (10 hours) \$3,200

Assume, that a change occurs. The production process for Job 2 is automated. Now Job 2 only requires 2 hours of direct labor, but 6 hours of mechanical processing. Job 1 is unaffected by the change. As a result, total overhead increases from \$6,400 to \$7,200. After automation, the company continues to use direct labor hours to allocate overhead. Based on the preceding, which of the following will occur?

- The amount of overhead assigned to each job will increase. NO
- The amount of overhead assigned to Job 1 will increase. YES
- The amount of overhead assigned to Job 2 will increase. NO
- Job 1 will be forced to automate immediately. NOT NECESSARILY
- None of the above X

"New" system

7,200 OH

$\frac{10}{12}$ DL Hrs

Job 1
\$6,000

$\frac{2}{12}$ DL Hrs

Job 2
\$1,200

"OLD" system →

15. Hickory Home Company manufactures and sells two lines of furniture, case goods and upholstery. During the most recent accounting period, the Case Goods and Upholstery Divisions sold 15,000 and 2,000 units, respectively. The company's most recent financial statements are shown below:

	Case Goods Division	Upholstery Division
Sales	\$800,000	\$200,000
Less: cost of goods sold:		
Unit-level production cost	500,000	120,000
Depreciation-production equipment	120,000	30,000
Gross margin	180,000	50,000
Less: operating expenses:		
Unit-level selling and admin.	30,000	25,000
Corporate-level facility exp. (fixed)	26,000	26,000
Net income (loss)	\$124,000	\$ (1,000)

Upholst.
CM stmt
\$200,000
- 120,000
- 25,000
55,000 CM
- 56,000 FC
(1,000)

If unit sales for both divisions increased 10%, the company would report which of the following?

- A \$26,000 increase in gross margin for the Upholstery Division
- A 10% increase in total net income of the company.
- They say to always guess "C" if you don't know the answer.
- A decline in profit for the Upholstery Division
- Net income for the Upholstery Division of \$4,500

If sales ↑ by 10%:

$$55,000 \times 1.1 = 60,500$$

- 56,000 FC

\$4,500 profit

16. Speedy Spandex Company provided the following information related to its inventory sales and purchases for December 2007 and the first quarter of 2008:

	Dec. 2007 (Actual)	Jan. 2008 (Budgeted)	Feb. 2008 (Budgeted)	March 2008 (Budgeted)
Cost of goods sold	\$40,000	\$ 70,000	\$ 90,000	\$ 60,000

Desired ending inventory levels are 25% of the following month's projected cost of goods sold. If the ending inventory for December 2007 is \$18,000, what would be the budgeted purchases of inventory in February 2008?

- \$ 74,500
- \$ 82,500
- \$ 92,500
- \$105,000
- None of the above

Feb Inv	
Beq.	22.5
Purch.	X
End	15

90 COGS

-OR-

Equation	
Begin INV	22.5
+ Purchases	+ 90
- COGS	- X
End INV	15

17. Kobey Company makes a product that is expected to use 1.4 pounds of material per unit of product. The material has a standard cost of \$2.25 per pound. Kobey actually used 1.3 pounds of material per unit of product made in January. The actual cost of material was \$2.10 per pound. Based only on this information, what would be the condition of the variances for the January production?

- unfavorable for price and unfavorable for usage
- unfavorable for price and favorable for usage
- favorable for price and unfavorable for usage
- favorable for price and favorable for usage
- favorable for the time being, unfavorable in the long run.

AP 2.10	SP 2.25	SP 2.25
AQ 1.3	AQ 1.3	SQ 1.4
F		F

18. The Bach Company provides the following standard cost data:

Direct material (3 gallons @ \$5 per gallon)	\$15.00
Direct labor (2 hours @ \$12 per hour)	24.00
During the period, the company produced and sold 24,000 units, incurring the following costs:	
Direct materials	72,000 gallons at \$5.00 per gallon
Direct labor	48,000 hours at \$12.05 per hour

The direct labor price variance was

- a. \$2,400 favorable.
- b. \$2,400 unfavorable.
- c. \$2,375 favorable.
- d. \$2,375 unfavorable.
- e. None of the above.

$$\begin{array}{r} AP \ 12.05 \\ AQ \ 48,000 \end{array} \quad \begin{array}{r} SP \ 12 \\ AQ \ 48,000 \end{array}$$

$$5¢ \times 48,000 = 2,400 \ U$$

19. Riley Industries produces two types of electronic decoders, Y and Z. Decoder Y is more sophisticated and requires more programming and testing than does Z. Because of these differences, the company wants to use activity-based costing to allocate overhead costs. It has identified four activity pools.

Activity Pools	Cost Pool Total	Cost Driver
Repairs/maint on assembly machines	\$275,000	# of units produced
Programming cost	\$390,000	# of programming hours
Software inspections	\$ 31,200	# of inspections
Product testing	\$ 28,500	# of tests
Total	\$724,700	

Expected activity for each product follows.

	# of units	# of programming hours	# of inspections	# of tests
Decoder Y	19,000	2,500	180	1,200
Decoder Z	36,000	1,400	60	700

How much of the programming costs will be allocated to decoder Y using activity-based costing? (Round your answer to the nearest dollar.)

- a. \$140,000
- b. \$250,000
- c. \$134,727
- d. \$464,551
- e. None of the above

$$\text{Programming } \$390,000 \times \frac{\text{Y's use } 2,500}{(2,500 + 1,400)} = \underline{\underline{250,000}}$$

20. Yamamoto Company produces two types of computer speakers. The Prestige line is made to provide excellent sound for the most demanding applications. The Standard line is geared toward workplace use and delivers average performance. During its most recent accounting period, the company produced 4,000 Prestige speakers and 6,000 Standard speakers. Each speaker uses two direct labor hours. The company incurred \$100,000 of setup costs. Fifteen batches were run for the Prestige line and five batches for the Standard line. What will happen if Yamamoto uses direct labor as its company-wide overhead allocation base instead of using activity-based costing?

- a. The Prestige speakers will be overcosted.
- b. The Standard speakers will be overcosted.
- c. The Prestige speakers will be costed accurately.
- d. The Standard speakers will be undercosted.
- e. None of the above

	Prestige	Standard
w/DL	\$40,000	\$60,000
w/ABC	\$75,000	\$25,000

21. When would a variance be labeled as favorable?
- a. When expected sales are greater than actual sales *NO... this is unfavorable*
 - b. When actual costs are greater than budgeted costs *NO... this is unfavorable*
 - c. When standard costs are less than actual costs *NO... UNFAV.*
 - d. When actual costs are less than standard costs
 - e. When the conditions for activity-based costing are true. *≠ make sense*

22. Harrell Company makes a product that is expected to require 3.0 hours of labor per unit of product. The standard cost of labor is \$8.00. Harrell actually used 3.2 hours of labor per unit of product. The actual cost of labor was \$7.75 per hour. Harrell expected to make 1,100 units of the product during the period but actually made 1,200 units. What is the labor usage variance?

- a. \$1,920 unfavorable
- b. \$1,860 unfavorable
- c. \$1,760 unfavorable
- d. \$ 960 favorable
- e. None of the above

*SP \$8 SQ 3.0
AQ 3.2*

*.2 hr x \$8
= \$1.60 per unit UNFAV.
x 1,200 units
\$1,920*

23. The following information is provided by the Airrick M. Orris (AMO) Company:

Actual direct material cost	\$24,000
Standard direct material cost	\$20,000
Direct material usage variance	\$3,000 unfavorable

What is the direct material price variance?

- a. \$1,000 favorable
- b. \$1,000 unfavorable
- c. \$5,000 unfavorable
- d. \$7,000 unfavorable
- e. There is not enough information to answer this question. (To receive credit for this response, you must clearly explain your reasoning and submit your response with your completed scantron sheet). → *To get credit, your story must clearly discuss the potential for change in inventory levels.*

AP AQ Price SQ SQ Quant

\$24,000 \$23,000 \$20,000

\$3,000 U

\$1,000 U

24. Rossi produces a variety of garden tools in a highly automated manufacturing facility. The costs and cost drivers associated with four activity cost pools are given below.

ACTIVITIES:	UNIT LEVEL	BATCH LEVEL	PRODUCT LEVEL	FACILITY LEVEL
Total Cost	\$30,000	\$12,000	\$6,000	\$36,000
Total Cost Driver Volume	5,000 labor hrs	240 set ups	% of use	36,000 units
Allocation rate	\$6 per labor hr	\$50 per set up		\$1 per unit

Production of 10,000 units of a hand-held tiller required 500 labor hours, 40 setups, and consumed 50% of the product sustaining activities. Overhead is allocated using the activity-based costing system. Direct production costs for the tillers are \$10.20 each. If the tiller is priced at cost plus 40%, what is the expected selling price for each tiller?

- a. \$16.80
- b. \$12.00
- c. \$26.04
- d. \$14.28
- e. None of the above

Unit \$6 x 500 hrs = 3,000

batch \$50 x 40 setups = 2,000

prod \$6000 x 50% = 3,000

fac \$1 x 10,000 units = 10,000

\$18,000 allocated OH

÷ 10,000 units

\$1.80 OH per unit

\$10.20 Direct costs

\$12.00 Total unit cost

x 1.4 mark up

\$16.80

25. Select the incorrect statement regarding flexible budgets.

- a. Flexible budgets show the estimated revenues and costs at multiple volume levels.
- b. The 'flexible' adjective means the budget can to accommodate unexpected events.
- c. Standard prices and costs are typically used in preparing a flexible budget
- d. All of the above are correct, but ask yourself, "are you looking for correct answers?"
- e. A flexible budget is also known as a static budget.

→ no... the problem asks for an incorrect stat.