

1. Reading review questions

a. In your own words, explain the similarities and differences between accounting and bookkeeping. Bookkeeping is the subset of accounting activities specifically concerned with recording transactions in the AIS, leading eventually to the production of the four general purpose financial statements. Although both accounting and bookkeeping require some elements of critical thinking, accounting probably requires more. In addition, the essential elements of bookkeeping can be mastered in a much shorter time than the entire body of knowledge in accounting.

b. What systems do accountants use to create and modify a chart of accounts? In general, most charts of accounts follow a block or hierarchical coding system. In block coding, similar items are coded similarly; for example, all current assets might have account numbers that start with "1." Hierarchical coding is good for more complex charts of accounts, and is a specialized form of block coding. In hierarchical coding, groups of digits have meaning. Such a system might be used in a business that has multiple product lines and / or multiple geographic locations.

c. What internal controls are common in the accounting cycle? Internal controls useful in completing the accounting cycle include: sequentially numbered documents, adequate supervision, training & education and separation of duties. In addition, the requirement that journal entries maintain the equality of debits and credits is also an internal control.

d. How is human judgment involved in the accounting cycle? Human judgment is required to recognize recordable transactions. To the extent that the accounting cycle involves estimates (as with depreciation and bad debts), human judgment is also important.

e. How has information technology been employed in the accounting cycle? Information technology is an important component of most modern accounting information systems; however, the technology is not the system. Common IT tools employed in the accounting cycle include: general ledger software, spreadsheets, relational databases and enterprise resource planning systems. Auditors can also use IT to sample transactions.

f. List and discuss the six common types of adjusting entries found in most accounting information systems. Accrued revenues occur when an organization provides goods or services in one accounting period, but does not bill clients in that same period. Accrued expenses, on the other hand, occur when an organization incurs an expense, but does not pay cash until a subsequent period. Prepaid expenses are assets purchased in one period that are used up over multiple accounting periods, while deferred revenues involve the receipt of cash in one period for work that will be performed in a subsequent period. Depreciation and bad debt adjustments both involve estimates.

g. Explain the purpose and structure of each general-purpose financial statement. AIS outputs associated with the accounting cycle include four general-purpose financial statements. The income statement, which includes revenues and expenses, reports the results of business activity on the accrual basis for a specified period of time. The statement of shareholders' equity tracks the changes in both paid-in capital and retained earnings, also for a period of time. The balance sheet embodies the accounting equation (assets = liabilities + equity), and reports financial position at a specified point in time. The statement of cash flows comprises three sections (operating, investing and financing), and reports the changes in cash for a specified period of time.

h. In a manner specified by your instructor (e.g., individually or with a group, as a written paper or as an oral presentation), prepare an original response to one or more of the questions for this chapter's "AIS in the Business World." As in previous editions, I've posted responses to each chapter's AIS in the Business World on my accounting information systems blog (www.bobhurtaiis.blogspot.com). Look for the 4th edition's responses in the 15 December 2014 post.

2. Multiple choice review questions. Answers to all of these questions appear at the end of the textbook itself.

3. Reading review problem

a. How should Regal code its chart of accounts to facilitate financial reporting? Create account numbers for cash, capital stock and advertising expense for the following Regal theatres: Regal O'Fallon Stadium 14 (O'Fallon, Missouri), Regal Windward Stadium 10 (Kaneohe, Hawaii) and Regal Goldstream Stadium 16 (Fairbanks, Alaska). Regal should use some form of hierarchical coding for financial reporting purposes. A three-part code could be appropriate, where one set of digits denotes the state, a second set of digits denotes the specific theatre and a third set of digits denotes the specific account number. The latter should be block coded.

Using that system would yield the results shown below for the accounts and theatres noted. (The state code is based on an alphabetical listing of all 50 states. The theatre code is an assumption; so long as it's consistent within the same theatre, any two digits should be OK. The account code is based on a standard block system.)

- Regal O'Fallon Stadium 14
 - Cash: 25.01.101
 - Capital stock: 25.01.501
 - Advertising expense: 25.01.701

- Regal Windward Stadium 10
 - Cash: 11.01.101
 - Capital stock: 11.01.501
 - Advertising expense: 11.01.701
- Regal Goldstream Stadium 16
 - Cash: 02.01.101
 - Capital stock: 02.01.501
 - Advertising expense: 02.01.501

b. Suggest three source documents Regal would use to complete the steps in the accounting cycle. To pay its bills, Regal would use checks. It would use invoices as the basis for writing those checks. Credit card / receipts for cash would be used for things like ticket and concession sales.

c. What journal entries would Regal make to record the transactions indicated above? Selling tickets: Debit Cash, Credit Sales. Paying employees: Debit Wages Expense, Credit various liability accounts for withholdings, Credit Cash for net pay. Purchasing snack foods: Debit Snack Foods Inventory, Credit Accounts Payable. Advertising new films: Debit Advertising Expense, Credit Accounts Payable. Declaring dividends on its capital stock: Debit Retained Earnings, Credit Dividends Payable.

d. What roles would human judgment and information technology play in Regal's transaction processing activities? Human judgment would be important in deciding when and how much to pay in dividends, as well as in choosing which films to show in which theatres. Information technology would allow Regal to send and receive data electronically from its various theatres, as well as to produce financial statements quickly and easily.

4. Making choices and exercising judgment

Students' answers may vary significantly since the point of these exercises is for them to think critically. Here are a few notes as a guide.

- a. Recordable transactions are I and IV.
- b. Principles-based accounting will probably not impact the design of the AIS at all, since it focuses more on judgment in recording transactions and reporting information. The steps in the accounting cycle are unlikely to change.
- c. Students could calculate any of a variety of ratios, prepare common-size statements or use other techniques.

5. Field exercises

Answers to these exercises will vary significantly. Although I'm not providing solutions to them, don't hesitate to share your students' work with me if they come up with an especially strong response.

6. Journal entries

a	Cash	\$ 1,750,000	
	Capital stock		\$ 50,000
	Additional paid-in capital		1,700,000
b	Accounts receivable	10,000	
	Sales		10,000
c	Supplies	3,000	
	Accounts payable		3,000
d	Utility expense	1,500	
	Cash		1,500
e	no entry required		
f	Wages expense	\$ 6,000	
	Cash		\$ 6,000
g	Equipment	50,000	
	Cash		10,000
	Notes payable		40,000
h	Cash	5,000	
	Accounts receivable		5,000
i	Accounts payable	1,400	
	Cash		1,400
j	Interest expense	400	
	Interest payable		400

7. Adjusting entries.

a	Depreciation expense	\$ 1,000	
	Accumulated depreciation		\$ 1,000
b	Interest expense	100	
	Interest payable		100
c	Wages expense	1,000	
	Wages payable		1,000
d	Deferred fees	300	
	Sales		300
e	Supplies expense	650	
	Supplies		650
f	no entry		
g	Bad debt expense	160	
	Allowance for bad debts		160

GLP Corporation
 Adjusted trial balance
 September 30, 20x4

Cash	\$	6,000	
Accounts receivable		2,500	
Allowance for bad debts			\$ 360
Inventory		4,500	
Supplies		150	
Equipment		15,000	
Accumulated depreciation			11,000
Accounts payable			1,200
Wages payable			1,000
Interest payable			100
Notes payable			6,000
Deferred fees			600
Capital stock			7,000
Additional paid-in capital			8,000
Retained earnings			11,000
Sales			16,300
Cost of goods sold		13,500	
Advertising expense		5,000	
Wages expense		13,000	
Interest expense		100	
Depreciation expense		1,000	
Supplies expense		650	
Bad debt expense		160	
Miscellaneous expense		1,000	
Totals	\$	62,560	\$ 62,560

8. Financial statements.

GLP Corporation

Income statement

For the quarter ended September 30, 20x4

Sales	\$	16,300
Cost of goods sold		<u>13,500</u>
Gross profit	\$	2,800

Expenses:

Advertising expense	\$	5,000	
Wages expense		13,000	
Interest expense		100	
Depreciation expense		1,000	
Supplies expense		650	
Bad debt expense		160	
Miscellaneous expense		<u>1,000</u>	<u>20,910</u>
Net loss	\$		<u><u>(18,110)</u></u>

GLP Corporation
 Balance sheet
 As of September 30, 20x4

Assets		
Cash	\$	6,000
Accounts receivable (net)		2,140
Inventory		4,500
Supplies		150
Equipment (net)		4,000
Total assets	\$	<u>16,790</u>

Liabilities & equity		
Accounts payable	\$	1,200
Wages payable		1,000
Interest payable		100
Notes payable		6,000
Deferred fees		600
	\$	<u>8,900</u>

Capital stock	\$	7,000
Additional paid-in capital		8,000
Retained earnings (deficit)		(7,110)
		<u>7,890</u>
Total liabilities & equity	\$	<u>16,790</u>

9. Coding systems

- mnemonic
- sequential
- sequential
- hierarchical
- sequential
- hierarchical
- block
- block
- block
- block

10. Terminology

- F
- D
- C

4. B
5. I
6. G
7. A
8. H
9. E
10. J

11. Multiple choice questions

1. B
2. A
3. C
4. B
5. D

12. Statement evaluation

- a. never true
- b. sometimes true. The adjusting entry for an accrued liability is an example.
- c. always true
- d. sometimes true. The complexity of the chart of accounts will help determine which system to use.
- e. never true
- f. sometimes true. The statement describes an accrued revenue adjustment; the term “accrual” could also be used for an accrued expense.
- g. never true
- h. always true
- i. sometimes true. Block coding facilitates closing entries, but not all automated AIS use block coding.
- j. always true

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End-of-chapter solutions

Chapter 2: Transaction Processing in the AIS

13. Excel application

Equipment basis	\$	65,000
Salvage value		3,000
Estimated life		5

TPL Corporation

Equipment depreciation schedule

Straight-line

Year	Depreciation expense	Accumulated depreciation	Book value
1	\$12,400	\$12,400	\$52,600
2	12,400	24,800	40,200
3	12,400	37,200	27,800
4	12,400	49,600	15,400
5	12,400	62,000	3,000

TPL Corporation

Equipment depreciation schedule

SYD

Year	Depreciation expense	Accumulated depreciation	Book value
1	\$20,667	\$20,667	\$44,333
2	16,533	37,200	27,800
3	12,400	49,600	15,400
4	8,267	57,867	7,133
5	4,133	62,000	3,000