

Basic Knowledge

Ch1

Accounting Data

Internal user :

- Management (Do we need to borrow in the near future?)
Managers rely on accounting data to form their business decisions such as investment, financing and pricing decisions.
- Human Resources (Can we afford to give our employees a pay raise?)
Employees are interested in knowing how well a company is performing as it could have implications for their job security and income.
- Finance (Is cash sufficient to pay dividends to the stockholders?)
Preparing and monitoring budgets effectively requires reliable accounting data relating to the various activities, processes, products, services, segments and departments of the business.
- Marketing (What price for our product will maximize net income?)

External user :

- IRS
- Investors (Did the company earn a satisfactory income?)
Investors use accounting information to determine whether an investment is a good fit for their portfolio and whether they should hold, increase or decrease their investment.
- Labor Unions
- Creditors (Will the company be able to pay its short-term debts?)
use accounting information of borrowers to assess their credit worthiness, i.e. their ability to pay back any loan.
Lenders offer loans and other credit facilities on terms that are based on the assessment of financial health of borrowers.
- SEC
- Customers

IFRS

International Financial Reporting Standards (IFRS)

International Accounting Standards Board (IASB) formulates IFRS

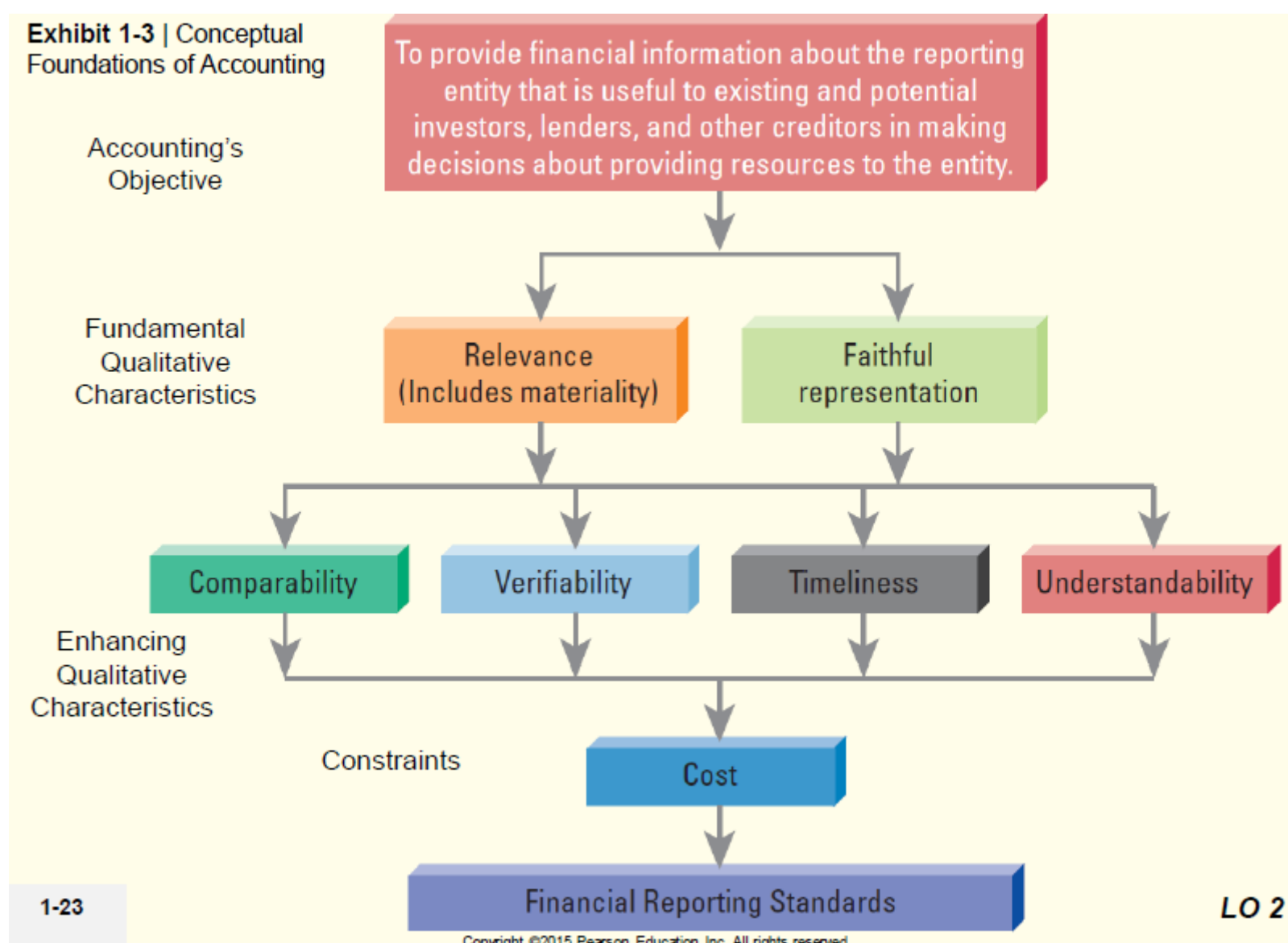
GAAP

generally accepted accounting principles (GAAP)

Financial Accounting Standards Board (FASB) formulates GAAP

4 Assumptions:	4 Principles:	4 Constraints:
<ul style="list-style-type: none"> • Business Entity • Strictly use by company • Going Concern • Bankrupts future • Monetary Unit • Unique monetary unit • Time Period • a year 	<ul style="list-style-type: none"> • Historical Cost • original cost are recorded • Revenue Recognition • obligation completion • Matching • record matches • Accrual • 权责发生制 	<ul style="list-style-type: none"> • Objectivity • Materiality • Comparability • Prudence

Financial information



Ethic

Ethics involves making difficult choices under pressure, and should be kept in mind in making every decision, including those involving accounting

type of account

The type of account determines how to record increases and decreases.

Debit account

- increase when debit entry to account
- has debit balance

credit account

- increase when credit entry to account
- has credit balance (eg: Accounts Payable had a normal beginning balance of \$1,700 means \$1,700 in credit)

Assets

Natural of asset: an economic resource that's expected to benefit future operations

- Cash
- Accounts Receivable
- Notes Receivable
- Inventory
- Prepaid Expenses
- Land
- Building
- Equipment Furniture and Fixtures

Liabilities

- Accounts Payable
- Notes Payable
- Accrued Liabilities (应付费)

Stockholders' Equity

- Common Stock
- Retained Earnings
 - Dividends
 - Revenues
 - Expenses

Sequence for recording transactions and preparing financial statements:

1. Journal
2. Ledger
3. Trail balance
4. Financial statements

Ch3

Accrual Accounting vs Cash-Basis Accounting

Categories of Adjustments

- 1. Deferrals(延迟款项)
 - Prepaid expense
 - Unearned revenue
- 2. Accruals(应计项目)
 - Accrued expense
 - Accrued revenue
- 3. Depreciation(折旧)

Summary of Adjusting Entries

Category of Adjustment	Type of Account	
	Debit	Credit
Prepaid expense	Expense	Asset
Depreciation	Expense	Contra asset
Accrued expense	Expense	Liability
Accrued revenue	Asset	Revenue
Unearned revenue	Liability	Revenue

Closing the book

- Done after financial statements are prepared
- Set temporary accounts to zero
- Transfers balances to retained earnings account
- Journalizes activity in Statement of Retained Earnings

Temporary and Permanent Accounts

Temporary

- Revenues, Expenses and Dividends
- Closed
- Balances represent a period of time

Permanent

- Asset, liability and equity accounts
- Not closed
- Ending balance of one period carries over to following period

Account for inventory

Inventory classified in the financial statements as an **asset**

As **cost of goods** on the **income statement**

Which accounts that Merchandisers have and service entities don't?

cost of goods sold and inventory

Perpetual System

- Record revenue and asset received
- Record cost of goods sold and reduction of inventory

Inventory cost methods

Specific unit

Used for businesses with unique inventory items

Average

weighted-average

Inventory			
Beg bal	(10 units @ \$10)	100	
Purchases:			Cost of goods sold
No. 1	(25 units @ \$14)	350	(40 units @ ?) ← \$15 600 ?
No. 2	(25 units @ \$18)	450	
End bal	(20 units @ ?) \$15	300?	

Goods Available		Number of Units	Total Cost
Goods available	=	<u>10 + 25 + 25 = 60 units</u>	<u>\$100 + \$350 + \$450 = \$900</u>
Cost of goods sold	=	40 units	? 600
Ending inventory	=	20 units	? 300

FIFO

FIFO Cost

40 units sold

 20 units on hand

Inventory (at FIFO cost)

Beg bal	(10 units @ \$10)	100		
			(10 units @ \$10)	100
Purchases:				
No. 1	(25 units @ \$14)	350		
			(25 units @ \$14)	350
No. 2	(25 units @ \$18)	450		
			(5 units @ \$18)	90
End bal	(20 units @ \$18)	360		

Cost of Good Sold

	(10 units @ \$10)	100		
	(25 units @ \$14)	350		
	(5 units @ \$18)	90		
End bal	(40 units)	540		

LIFO

LIFO Cost

40 units sold
20 units on hand

Inventory (at LIFO cost)				
Beg bal	(10 units @ \$10)	100		
Purchases:				
No. 1	(25 units @ \$14)	350	(15 units @ \$14)	210
No. 2	(25 units @ \$18)	450	(25 units @ \$18)	450
End bal	(10 units @ \$10) (10 units @ \$14)	} 240		

Cost of Good Sold

	(25 units @ \$18)	450	
	(15 units @ \$14)	210	
End bal	(40 units)	660	

Ch7 Plant Assets, Natural Resources and Intangibles

PPE: property, plant, and equipment

Depreciation is a process of allocating the cost of a PPE over its useful life.

Capital expenditures

Capital expenditures increase the asset's capacity or extend its useful life

Capitalized, means the cost is added to an asset account and not expensed immediately

Depreciation Methods

Straight-line

Year	Depreciable Cost	x	Rate	=	Annual Expense	Accumulated Depreciation	Book Value
2014	\$ 12,000		20%		\$2,400	\$2,400	\$10,600
2015	12,000		20%		\$2,400	\$4,800	\$8,200
2016	12,000		20%		\$2,400	\$7,200	\$5,800
2017	12,000		20%		\$2,400	\$9,600	\$3,400
2018	12,000		20%		\$2,400	\$12,000	\$1,000

Units-of-Production

Year	Miles Driven	x	Rate per Mile	=	Annual Expense	Accumulated Depreciation	Book Value
2014	15,000		\$0.12		\$1,800	\$1,800	\$11,200
2015	30,000		\$0.12		\$3,600	\$5,400	\$7,600
2016	20,000		\$0.12		\$2,400	\$7,800	\$5,200
2017	25,000		\$0.12		\$3,000	\$10,800	\$2,200
2018	10,000		\$0.12		\$1,200	\$12,000	\$1,000

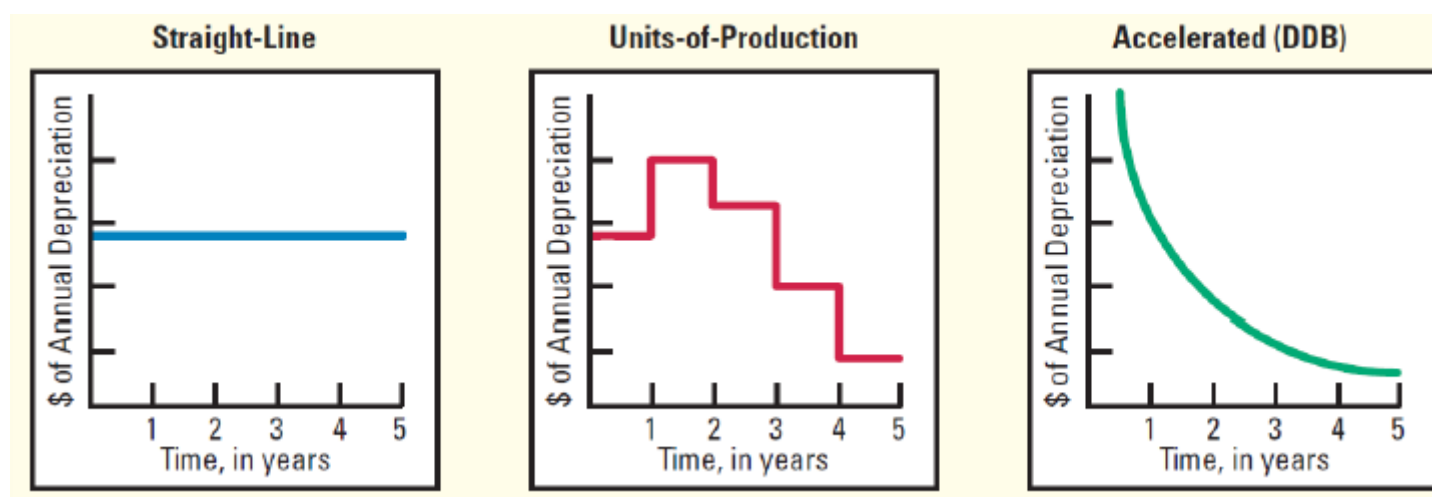
Double-declining-balance

Bgn book val = \$13,000

Year	Beginning Book value	x	Declining Balance Rate	=	Annual Expense	Accumulated Depreciation	Book Value
2014	\$13,000		40%		\$5,200	\$5,200	\$7,800
2015	\$7,800		40%		\$3,120	\$8,320	\$4,680
2016	\$4,680		40%		\$1,872	\$10,192	\$2,808
2017	\$2,808		40%		\$1,123	\$11,315	\$1,685
2018	\$1,685		40%		\$685	\$12,000	\$1,000

*.

5 years \Rightarrow 20% per year
 $\times 2 = 40\%$ per year



Ch9 liabilities

A liability is a probable **future payment** of assets or services that a company is **presently obligated** to make as a result of a **past transaction or event**.

- Current Liabilities: Expected to be paid within one year
 - Estimated liability: Current liabilities of unknown Amounts
- Long-Term Liabilities: Expected not to be paid within a year.
- Contingent Liability: may only occur depending on the **outcome of an uncertain future event**. Example is a lawsuit

Current Ratio

A ratio under 1 indicates that the company's debts due in a year or less are greater than its assets (cash or other short-term assets expected to be converted to cash within a year or less).

On the other hand, in theory, the higher the current ratio, the more capable a company is of paying its obligations because it has a larger proportion of short-term asset value relative to the value of its short-term liabilities

while a high ratio, say over 3, could indicate the company can cover its current liabilities three times, it may indicate that it's not using its current assets efficiently, is not securing financing very well, or is not managing its working capital.

Interest Payable

James Burrows borrowed \$8,000 on Dec. 16, 2009, by signing a 12%, 60-day note payable.

On December 16, 2019, James Burrows would make the following entry:

Dec 16	Cash	Dr	8,000	Cr	
	Notes Payable				8,000
	borrow from bank				

On December 31, 2019, the adjustment is:

Dec 31	Interest Expense	Dr	40	Cr	
	Interest Payable				40

On February 14, 2020, James Burrows would make the following entry.

		Dr	Cr
Feb 14	Notes Payable	8,000	
	Interest Payable	40	
	Interest expenses	120	
	Cash		8,160
	To record payable of note		

Sales Taxes Payable

On May 15, 2019, Max Hardware sold building materials for \$7,500 that are subject to a 6% sales tax.

		Dr	Cr
May 15	Cash	7,950	
	Sales		7,500
	Sales Tax Payable		450

Unearned Revenues

On May 1, 2019, A-1 Catering received \$3,000 in advance for catering a wedding party to take place on July 12, 2019.

		Dr	Cr
May 1	Cash	3,000	
	Unearned Revenue		3,000
	To record advance payment		
July 12	Unearned Revenue	3,000	
	Revenue - Catering		3,000
	To recognize revenue received in advance		

Ch10 Shareholders' Equity

Shareholders' Equity represents the owners' claims against the assets of a corporation after deducting all liabilities.

Cash dividend become a legal liability on date of declaration and approval.

T-Account

Record of increases and decreases in a specific asset, liability, equity, revenue, or expense element

- Debit - 'Left' (cash increase)
- Credit - 'Right' (cash decrease)

ASSETS		=	LIABILITIES		+	STOCKHOLDERS' EQUITY					
Assets			Liabilities			Common Stock		Retained Earnings		Dividends	
Debit	Credit		Debit	Credit		Debit	Credit	Debit	Credit	Debit	Credit
+	-		-	+		-	+	-	+	+	-
						Revenues		Expenses			
						Debit	Credit	Debit	Credit		
						-	+	+	-		

Journal

	A	B		
1	Date	Accounts and Explanations	Debit	Credit
2	Apr 1	Cash	50,000	
3		Common Stock		50,000
4		<i>Issued common stock.</i>		

Ledger

Assets		=	Liabilities		+	Stockholders' Equity			
Cash			Accounts Payable			Common Stock		Dividends	
(1) 50,000	(2) 40,000		(7) 1,900	(3) 3,700		(1) 50,000		(11) 2,100	
(4) 7,000	(6) 2,700			Bal 1,800		Bal 50,000		Bal 2,100	
(9) 1,000	(7) 1,900								
(10) 22,000	(11) 2,100								
Bal 33,300									
Accounts Receivable						Revenue		Expenses	
(5) 3,000	(9) 1,000					Service Revenue		Rent Expense	
Bal 2,000						(4) 7,000		(6) 1,100	
						(5) 3,000		Bal 1,100	
						Bal 10,000			
Supplies								Salary Expense	
(3) 3,700								(6) 1,200	
Bal 3,700								Bal 1,200	
Land								Utilities Expense	
(2) 40,000	(10) 22,000							(6) 400	
Bal 18,000								Bal 400	

Trial Balance

The list of all accounts with their balances

The following accounts are taken from the ledger of Riley Company at December 31, Year 1.

200	Notes Payable	\$ 30,000	101	Cash	\$ 11,000
301	Owner's Capital	35,000	126	Supplies	11,000
157	Equipment	92,000	729	Rent Expense	6,000
306	Owner's Drawings	13,000	212	Salaries and Wages Payable	13,000
726	Salaries and Wages Expense	43,000	201	Accounts Payable	18,000
400	Service Revenue	93,000	112	Accounts Receivable	13,000

RILEY COMPANY
Trial Balance
December 31, Year 1

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 11,000	
Accounts Receivable	13,000	
Supplies	11,000	
Equipment	92,000	
Notes Payable		\$ 30,000
Accounts Payable		18,000
Salaries and Wages Payable		13,000
Owner's Capital		35,000
Owner's Drawings	13,000	
Service Revenue		93,000
Rent Expense	6,000	
Salaries and Wages Expenses	43,000	
	<u>\$ 189,000</u>	<u>\$ 189,000</u>

Income statement

Example Corporation
Income Statement
For the year ended December 31, 2019

Sales (all on credit)	\$500,000
Cost of goods sold	<u>380,000</u>
Gross profit	<i>GP</i> <u>120,000</u>
Operating expenses	
Selling expenses	35,000
Administrative expenses	<u>45,000</u>
Total operating expenses	<i>OE</i> <u>80,000</u>
Operating income	<i>OI = GP - OE</i> 40,000
Interest expense	<u>12,000</u>
	<i>interest of borrowing money from the bank</i>
Income before taxes	28,000
Income tax expense	<u>5,000</u>
Net income after taxes	<u>\$ 23,000</u>

Balance Sheet

Example Company Balance Sheet December 31, 2019				B/S	
ASSETS		LIABILITIES			
Current assets		Current liabilities			
Cash	存款	\$	2,100	Notes payable	\$ 5,000
Petty cash	現金		100	Accounts payable	35,900
Temporary investments			10,000	Wages payable	8,500
Accounts receivable - net	白糸		40,500	Interest payable	2,900
Inventory			31,000	Taxes payable	6,100
Supplies			3,800	Warranty liability	1,100
Prepaid insurance			1,500	Unearned revenues	1,500
Total current assets			89,000	Total current liabilities	61,000
Investments			36,000	Long-term liabilities	
Property, plant & equipment	fixed assets PPE (Lands, Buildings, Equip)			Notes payable	20,000
Land			5,500	Bonds payable	400,000
Land improvements			6,500	Total long-term liabilities	420,000
Buildings			180,000	Total liabilities	
Equipment			201,000		481,000
Less: accum depreciation			(56,000)	STOCKHOLDERS' EQUITY	
Prop, plant & equip - net			337,000		
Intangible assets				Common stock	110,000
Goodwill			105,000	Retained earnings	229,000
Trade names			200,000	Less: Treasury stock	(50,000)
Total intangible assets			305,000	Total stockholders' equity	289,000
Other assets			3,000		
Total assets	Σ		\$ 770,000	Total liabilities & stockholders' equity	\$ 770,000

Equation / Formula

*Equations are written in *L^AT_EX*

Basic

Accounting equation

$$Assets = Liabilities + Owner's Equity$$

$$Owner's Equity = Paid-in Capital + Retained Earnings$$

Paid-in capital: amount stockholders have invested in the corporation

Retained earnings: amount earned and kept for use in the business

$$Retained Earnings = Revenues - Expenses - Dividends$$

Revenues: inflows to resources that increase retained earnings by delivering goods or services to customers

Expenses: resource outflows that decrease retained earning due to operations

Dividends: distributions to stockholders generated by net income

$$Ending Balance of Retained Earnings = Begining Balance + Net Income - Dividends$$

Carrying amount

$$\text{Carrying amount of the equipment} = \text{Equipment} - \text{Accumulated depreciation}$$

Inventory

$$\text{Gross profit} = \text{revenue} - \text{cost of good sold}$$

$$\text{Goods available} = \text{Cost of goods sold} + \text{Ending Inventory}$$

$$\text{Ending Inventory} = \text{units of inventory on hand} * \text{cost per unit}$$

$$\text{Cost of goods sold} = \text{units of inventory sold} * \text{cost per unit}$$

$$\text{Cost of goods sold} = \text{Begining Inventory} + \text{Purchase in current period} - \text{Ending Inventory}$$

$$\text{Purchase in current period} = \text{purchase} - \text{purchase returns and allowances} + \text{freight-in}$$

Gross profit percentage

$$\text{Gross profit percentage} = \frac{\text{Gross profit}}{\text{Net sales revenue}}$$

Inventory Turnover Ratio

$$\frac{\text{Cost of goods sold}}{\text{Average inventory}^*}$$

$$*\text{Average inventory} = \frac{\text{beginning balance} + \text{ending balance}}{2}$$

Depreciation

$$\text{Book value} = \text{cost of PPE} - \text{accumulated depreciation}$$

$$\text{Depreciable Cost} = \text{Asset's cost} - \text{Estimated residual value}$$

$$\text{Depreciation expense per year} = \frac{\text{Cost} - \text{Residual value}}{\text{Usefullife, in year}}$$

$$\text{Depreciation per unit of output} = \frac{\text{Cost} - \text{Residual value}}{\text{Usefullife, in unit}}$$

$$\text{DDB depreciation rate per year} = \frac{1}{\text{Usefullife, in year}} * 2$$

Liabilities

Current Ratio

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Interest Payment

$$\text{Interest Payment} = \text{Bond Par Value} \times \text{Stated Interest Rate} * \text{Time}$$

Quizzes & Questions

Question 12**1 / 1 pts**

Which financial statement covers a period of time?

- ☐ Balance Sheet
- ☐ Income Statement
- ☐ Statement of cash flows
- ☒ Both b and c

Question 12**1 / 1 pts**

The error of posting \$300 as \$30 can be detected by

- ☒ dividing the out-of-balance amount by 9.
- ☐ dividing the out-of-balance amount by 2.
- ☐ totaling each account's balance in the ledger.
- ☐ examining the chart of accounts.

Question 5**1 / 1 pts**

Interest earned on a note receivable at December 31 equals \$400. What adjusting entry is required to accrue this interest?

- ☐

Interest Receivable	400		
Interest Revenue		400	
- ☒

Interest Expense	400		
Cash		400	
- ☐

Interest Expense	400		
Interest payable			400
- ☐

Interest Payable	400		
Interest Expense		400	

Question 7

1 / 1 pts

All of the following statements are true except one.
Which statement is false?



Accrual-basis accounting produces better information than cash-basis accounting.



Adjusting entries are required for a business that uses the cash-basis accounting.



The matching concept directs accountants to identify and measure all expenses incurred and deduct them from revenues earned during the same period.



A fiscal year is not always the same as a calendar year.

Beginning inv. \$70,000

Net purchase total \$365,000

Net sales \$500,000

Normal gross profit ratio 40%

Determine End. Inv. ?

$$40\% = \frac{\text{Gross Profit}}{\text{Sales}} \Rightarrow \text{Gross Profit} = 40\% \times \$500,000 = \$200,000$$

$$\text{COGS} = \text{Net Sales} - \text{Gross Profit} = \$300,000$$

$$\overset{10 \text{ kps}}{\text{Beg. Inv.}} + \overset{2 \text{ kps}}{\text{Purchases}} - \overset{4 \text{ kps}}{\text{End. Inv.}} = \overset{8 \text{ kps}}{\text{COGS}}$$

$$\$70,000 + \$365,000 - \text{End. Inv.} = \$300,000$$

$$\text{End. Inv.} = \$135,000$$