Taxation of Corporations and their Shareholders

Documents for Lecture on Chapter 1

Business Income, Deductions, and Accounting Methods

UNC Charlotte MACC Program

January 11, 2017

Note from Instructor - Chapter 1.

We begin with a chapter on business income, deductions and accounting methods. First we cover the general rule that expenses are deductible if they are ordinary and necessary.

An expenditure that is extravagant or excessive is not deductible. An owner of a corporation may take a large salary, but no dividend. If the IRS determines that the salary exceeds the value of the services provided by the owner, the excess amount will be treated as a nondeductible dividend payment. The corporation will have a reduction in compensation expense (and also payroll tax). For the individual, there will be a reduction in Social Security tax, and part of the "salary" payment will be treated as dividend income, which is subject to a lower capital gains tax rate. See text page 4-13.

Please note the reasons for that an expenditure may be non-deductible, on text pages 5 through 7.

(Text page 8) The deduction for meals and entertainment is generally limited to 50% of the expenditure. Such expenses are deductible only if reasonable in amount, and incurred while entertaining a customer other business associate.
In addition, a deduction for a gift to a customer or other business associate is limited to $25 per person, per year.

(Text pages 9-11) Rules for computing travel and transportation expense incurred for business purposes--and requirements for maintaining supporting documention for amounts spent, etc. for travel, transportation and entertainment.

(Text page 12) Rules for computing the domestic production activities deduction, and (Text page 13+) the rules for losses on disposition of business property and casualty losses of business property. These topics will have only brief coverage in our course. The domestic production activity deduction, is a deduction of 9% of a company's profit from production activities. With a 35% tax bracket and a 9% deduction, this allowance has the same impact for certain businesses as a reduction in the federal income tax rate of about 3%. Congress could have reduced the top tax rate for all corporations, but chose instead to target deduction for companies engaged in manufacturing and other activities that are considered to involve production. This deduction has the effect of reducing the income tax cost for companies that produce goods in the United States and export them to other countries. If the deduction were available only for companies engaged in exporting, the law would likely violate rules enforced by the (World Trade Organization) WTO. Therefore, the deduction is available for income from production activities, whether the products are exported to other countries, or not.

(Text page 15+) Next we move into accounting methods. The 2 main accounting methods are the accrual method and the cash method, which involves reporting of revenue and expense when cash is received or paid. A business generally has an option to choose an accounting method for tax purposes, but a method will not be allowed if the IRS determines that the method does not accurately present revenue and expense for the company. For example, a company that sells merchandise is required to be on the accrual method, at least for the purchases, cost of goods sold, sales, and collections cycles.

Page 8 of the lecture materials contains 3 review exercises that involve converting cash basis net income to accrual basis net income, and comparing GAAP and TAX rules for reporting rent revenue collected in advance.

Note from Instructor - Chapter 1. (Cont'd)

(Text page 16+). We review the rules for the cash method of accounting and focus our attention on situations where the company pays cash in one year, and receives the goods or services in a later year. Generally, a business must capitalize a cash payment that creates an asset extending into the following year – such as a payment of your office rent for the following year. You will learn about the 12-month rule, which is an exception to the general rule just described.

(Text page 19+) We will study the **accrual method rules for revenue**. We will consider situations where the company collects the cash in one year, and provides the goods or services to the customer in a later year. You are encouraged to apply these rules for the Great Company on pages 10 and 11 of the lecture materials, and review the answer on page 12.

In the lecture material starting on page 13, we will focus our attention on four types of expense and income:

We typically begin with an income statement prepared in accordance with GAAP, and make adjustments that are necessary to compute taxable income in accordance with the tax law. We need to have a good understanding of GAAP accounting methods so that we will be able to accurately adjust GAAP revenue and expense amounts to arrive at taxable income computed in accordance with tax law.

(Lecture notes, page 13) You will find a set of questions to ask when converting GAAP income to taxable income.
Then we will focus on problems involving:
(1) depreciation expense,
(2) uncollectible accounts receivable,
(3) rent received in advance, and
(4) warranty expense.

Let's master the rules for these important items.

With each of these problems our first step is to convert (1) GAAP-based income or expense balances to (2) balances that are in accordance with the tax law.

This first step (in solving these 4 types of problems) is related to chapter 1, and involves the application of specific tax rules learned in Chapter 1 (which identify needed adjustments to GAAP amounts).

We will need to have a clear understanding of the difference between the GAAP rules and TAX rules because every corporate tax return must include a reconciliation of BOOK and TAXABLE income.

The information obtained in the preceding steps is required so that the company can prepare the journal entry for the current income tax expense (or benefit) and for the deferred income tax expense (or benefit).

We will go ahead and compute such items as deferred tax assets, deferred tax liabilities, the effective tax rate, etc. Pages 5 and 6 of the lecture material contained helpful definitions from the Financial Accounting Standards Board.

[These last few steps are explained in Chapter 6, but it seems appropriate to go ahead and complete these additional steps now. If we don't have time to work all of them now, we can catch up when we cover Chapter 6.

	Chapter 1. Business Income,	**Page**	Connect
	Deductions & Accounting Methods		
1	BUSINESS EXPENSE DEDUCTION, Ordinary,	**2**	
2	Necessary, Reasonable Amount	**2**	
3	Unreasonable Salary, Constructive Dividend (Also Pg. 7-14)	**4**	
4	LIMITS: Non-deductible Business Expenditures:	**5**	
5	Public Policy, Political and Lobbying, Capital Expenditures		
6	Expenses to earn tax-free income - no deduction	**6**	47
7	Personal expenditures, Education expenses	**7**	
8	Meals, Entertainment. [Also gifts. Deduction limit: $25].	**8**	48
9	Travel & Transportation [must keep records]	**9**	49, 51
10	Domestic Production Activity Deduction	**12**	
11	Loss: Disposal of Business Property [Chapter 3]	**13**	
12	Business Casualty Losses	**14**	
13	ACCOUNTING Periods and Methods	**15**	
14	Cash Method, 12 month rule	**17**	59
15	Accrual Method - All-Events Test for income received	**19**	
16	Advance Collection of Income - Deferral method	**20**	64
17	Does not apply for interest and rental income		
18	Advance payment received for inventory	**20**	
19	Inventories, Uniform Capitalization	**21**	
20	Cost-flow methods: FIFO, Specific ID	**22**	
21	ACCRUAL of Expense (Deduct), All-Events Test,	**24**	
22	Economic Performance, Warranties	**24**	76
23	Note especially Exhibit 1-3	**26**	
24	Accrual for "Payment liabilities" - basically cash basis		
25	BAD DEBTS EXPENSE: (instructor handout)	**27**	
26	Direct Write-off vs. Allowance Method		
27	Deferred Tax Assets & Liabilities		
28	Limits on Accrual to Related Parties	**28**	79
29	Compare Cash and Accrual Methods	**29**	
30	Adopt or Change an Accounting Method	**30**	80

Numbers int last column are for homework

Chapter 1. Business Income, Deductions, and Accounting Methods – Connect Homework

47. [LO 1, LO 2] Indicate the amount (if any) that Josh can deduct as ordinary and necessary business deductions in each of the following expenditures and explain your solution.

a. Josh borrowed $50,000 from the First State Bank using his business assets as collateral. He used the money to buy City of Blanksville bonds. Over the course of a year, Josh paid interest of $4,200 on the borrowed funds, but he received $3,500 of interest on the bonds.

b. Josh purchased a piece of land for $45,000 in order to get a location to expand his business. He also paid $3,200 to construct a new driveway for access to the property.

c. This year Josh paid $15,000 to employ the mayor's son in the business. Josh would typically pay an employee with these responsibilities about $10,000 but the mayor assured Josh that after his son was hired, some city business would be coming his way.

d. Josh paid his brother, a mechanic, $3,000 to install a robotic machine for Josh's business. The amount he paid to his brother is comparable to what he would have paid to an unrelated party to do the same work. Once the installation was completed by his brother, Josh began calibrating the machine for operation. However, by the end of the year, he had not started using the machine in his business.

48. [LO 2] Ralph invited a potential client to dinner and the theatre. Ralph paid $250 for the dinner and $220 for the theatre tickets in advance. They first went to dinner and then they went to the theatre.

a. What amount can Ralph deduct if, prior to the dinner, he met with the potential client to discuss future business prospects?

b. What amount can Ralph deduct if he and the client only discussed business during the course of the dinner?

c. What amount can Ralph deduct if he and the potential client tried to discuss business during the course of the theatre performance but did not discuss business at any other time?

d. What amount can Ralph deduct if the potential client declined Ralph's invitation, so Ralph took his accountant to dinner and the theatre to reward his accountant for a hard day at work? At dinner, they discussed the accountant's workload and upcoming assignments.

49. [LO 2] Melissa recently paid $400 for round-trip airfare to San Francisco to attend a business conference for three days. Melissa also paid the following expenses:

$250 fee to register for the conference,
$300 per night for three night's lodging,
$200 for meals, and
$150 for cab fare.

a. What amount of the travel costs can Melissa deduct as business expenses?

b. Suppose that while Melissa was on the coast, she also spent two days sightseeing the national parks in the area. To do the sightseeing, she paid $1,000 for transportation, $800 for lodging, and $450 for meals during this part of her trip, which she considers personal in nature. What amount of the travel costs can Melissa deduct as business expenses?

c. Suppose that Melissa made the trip to San Francisco primarily to visit the national parks and only attended the business conference as an incidental benefit of being present on the coast at that time. What amount of the airfare can Melissa deduct as a business expense?

d. Suppose that Melissa's permanent residence and business was located in San Francisco. She attended the conference in San Francisco and paid $250 for the registration fee. She drove 100 miles over the course of three days and paid $90 for parking at the conference hotel. In addition, she spent $150 for breakfast and dinner over the three days of the conference. She bought breakfast on the way to the conference hotel and she bought dinner on her way home each night from the conference. What amount of these costs can Melissa deduct as business expenses?

51. [LO 2] Ryan is self-employed. This year Ryan used his personal auto for several long business trips. Ryan paid $1,500 for gasoline on these trips. His depreciation on the car if he was using it fully for business purposes would be $3,000. During the year, he drove his car a total of 12,000 miles (combination of business and personal travel).

a. Ryan can provide written documentation of the business purpose for trips totaling 3,000 miles. What business expense amount can Ryan deduct (if any) for these trips?

b. Ryan estimates that he drove approximately 1,300 miles on business trips, but he can only provide written documentation of the business purpose for trips totaling 820 miles. What business expense amount can Ryan deduct (if any) for these trips?

59. [LO 5] {Planning} Nicole is a calendar-year taxpayer who accounts for her business using the cash method. On average, Nicole sends out bills for about $12,000 of her services at the first of each month. The bills are due by the end of the month, and typically 70 percent of the bills are paid on time and 98 percent are paid within 60 days.

a. Suppose that Nicole is expecting a 2 percent reduction in her marginal tax rate next year. Ignoring the time value of money, estimate the tax savings for Nicole if she postpones mailing of bills for December until January 1 of next year.
b. Describe how the time value of money affects your calculations.
c. Would this tax savings strategy create any additional business risks? Explain.

64. [LO 5] On April 1 of year 0 Stephanie received a $9,000 payment for full payment on a three-year service contract (under the contract Stephanie is obligated to provide advisory services for the next three years).

a. What amount of income should Stephanie recognize in year 0 if she uses the accrual method of accounting (she recognized $2,250 for financial accounting purposes)?
b. What amount of income will Stephanie recognize in year 1 if she uses the accrual method of accounting?
c. What amount of income will Stephanie recognize in year 2, if she uses the accrual method of accounting?
d. What amount of income will Stephanie recognize in year 0 if she recognizes $5,000 of income from the contract for financial statement purposes?

76. [LO 5] BCS Corporation is a calendar-year, accrual-method taxpayer. BCS was formed and started its business activities on January 1, year 0. It reported the following information for year 0.
Indicate BCS's deductible amount for year 0 in each of the following alternative scenarios.

a. BCS provides two-year warranties on products it sells to customers. For its year 0 sales, BCS estimated and accrued $200,000 in warranty expense for financial accounting purposes. During year 0, BCS actually spent $30,000 repairing its product under the warranty.
b. BCS accrued an expense for $50,000 for amounts it anticipated it would be required to pay under the workers' compensation act. During year 0, BCS actually paid $10,000 for workers' compensation related liabilities.
c. In June of year 0, a display of BCS's product located in its showroom fell on and injured a customer. The customer sued BCS for $500,000. The case is scheduled to go to trial next year. BCS anticipates that it will lose the case and accrued a $500,000 expense on its financial statements.
d. Assume the same facts as in (c) except that BCS was required to pay $500,000 to a court-appointed escrow fund in year 0. If BCS loses the case in year 1, the money from the escrow fund will be transferred to the customer suing BCS.
e. On December 1 of year 0, BCS acquired equipment from Equip Company. As part of the purchase, BCS signed a warranty agreement with Equip so that Equip would warranty the equipment for two years (from December 1 of year 0 through November 30 of year 2). The cost of the warranty was $12,000. BCS paid Equip for the warranty in January of year 1.

79. [LO 5] Nancy operates a business that uses the accrual method of accounting. In December, Nancy asked her brother, Hank, to provide her business with consulting advice. Hank billed Nancy for $5,000 of consulting services in year 0 (a reasonable amount), but Nancy was only able to pay $3,000 of the bill by the end of year 0. However, Nancy paid the remainder of the bill in year 1.

a. How much of the $5,000 consulting services will Hank include in his income in year 0 if he uses the cash method of accounting? What amount can Nancy deduct in year 0 for the consulting services?
b. How much of the $5,000 consulting services will Hank include in his income in year 0 if he uses the accrual method of accounting? What amount can Nancy deduct in year 0 for the consulting services?

80. [LO 5] Erin is considering switching her business from the cash method to the accrual method at the beginning of next year (year 1).
Determine the amount and timing of her §481 adjustment assuming the IRS grants Erin's request in the following alternative scenarios.

a. At the end of end of year 0/beginning of year 1, Erin's business has $15,000 of accounts receivables and $18,000 of accounts payables that have not been recorded for tax purposes.
b. At the end of year 0/beginning of year 1, Erin's business reports $25,000 of accounts receivables and $9,000 of accounts payables that have not been recorded for tax purposes.

FASB Definitions (2 pages)

What is Taxable Income?

The excess of taxable revenues over tax deductible expenses and exemptions for the year as defined by the governmental taxing authority.

What is Income Tax (or Benefit) [Also provision]?

Tax (or benefit) is the total income tax expense (or benefit), including the provision (or benefit) for income taxes both currently payable and deferred.

What is Current Tax Expense (or Benefit)?

The amount of income **taxes paid or payable (or refundable)** for a year as determined by… provisions of enacted tax law to the taxable income **(**or excess of deductions over revenues for that year, i.e. loss**)**.

What is Deferred Income Tax Expense (Benefit).

The change during the year in an entity's deferred tax liabilities and assets.

For deferred tax liabilities and assets acquired in a purchase business combination during the year, it is the change since the combination date. Income tax expense (or benefit) for the year is allocated among continuing operations, discontinued operations, extraordinary items, and items charged or credited directly to shareholders' equity.

Deferred Tax Consequences. The future effects on income taxes as measured by the applicable enacted tax rate and provisions of the enacted tax law resulting from temporary differences and carryforwards at the end of the current year.

Deferred Tax Asset. The deferred tax consequences attributable to **deductible temporary differences** and carryforwards. A deferred tax asset is measured using the applicable enacted tax rate and provisions of the enacted tax law. A deferred tax asset is reduced by a valuation allowance if, based on the weight of evidence available, it is more likely than not that some portion or all of a deferred tax asset will not be realized.

Deferred Tax Liability. The deferred tax consequences attributable to **taxable temporary differences.**
A deferred tax liability is measured using the applicable enacted tax rate and provisions of the enacted tax law.

Temporary Difference. A difference between the **tax basis** of an asset or liability computed pursuant to the requirements in Subtopic 740-10 for tax positions, and its **reported amount** in the financial statements that will result in taxable or deductible amounts in future years when the reported amount of the asset or liability is recovered or settled, respectively.
Paragraph 740-10-25-20 cites eight examples of temporary differences. Some temporary differences cannot be identified with a particular asset or liability for financial reporting…, but those temporary differences do meet both of the following conditions:

a. Result from events that have been recognized in the financial statements

b. Will result in taxable or deductible amounts in future years based on provisions of the tax law.

Some events recognized in financial statements do not have tax consequences. Certain revenues are exempt from taxation and certain expenses are not deductible. Events that do not have tax consequences **do not give rise to temporary differences. [permanent]**

Taxable Temporary Difference. Temporary differences that **result in taxable amounts in future years** when the related asset is recovered or the related liability is settled.

Deductible Temporary Difference. Temporary differences that result in **deductible amounts in future years** when the related asset or liability is recovered or settled, respectively.

Tax Position. A position in a previously filed tax return or a position expected to be taken in a future tax return that is reflected in measuring current or deferred income tax assets and liabilities for interim or annual periods. A tax position can result in a permanent reduction of income taxes payable, a deferral of income taxes otherwise currently payable to future years, or a change in the expected realizability of deferred tax assets. The term tax position also encompasses, but is not limited to:

a. A decision not to file a tax return

b. An allocation or a shift of income between jurisdictions

c. The characterization of income or a decision to exclude reporting taxable income in a tax return

d. A decision to classify a transaction, entity, or other position in a tax return as tax exempt

e. An entity's status, including its status as a pass-through entity or a tax-exempt not-for-profit entity.

Unrecognized Tax Benefit. Difference between a tax position taken or expected to be **taken in a tax return** and the **benefit recognized** and measured pursuant to Subtopic 740-10.

Valuation Allowance. The portion of a deferred tax asset for which it is more likely than not that a tax benefit will not be realized.

Requirement.

A tax liability or asset shall be recognized based on the provisions of this Subtopic applicable to tax positions for the estimated taxes payable or refundable on tax returns for the current and prior years.

A **deferred tax liability or asset** shall be recognized for the estimated future tax effects attributable to temporary differences and **carryforwards**.

It shall be presumed that all **undistributed earnings of a subsidiary** will be transferred to the parent entity. Accordingly, the undistributed earnings of a subsidiary included in consolidated income shall be accounted for as a temporary difference ….

The presumption that all undistributed earnings will be transferred to the parent entity **may be overcome**, and no income taxes shall be accrued by the parent entity,….if sufficient evidence shows that the subsidiary has invested or will **invest the undistributed earnings indefinitely** or that the earnings will be remitted in a tax-free liquidation.

Carryforwards. Deductions or credits that cannot be utilized on the tax return during a year that may be carried forward to reduce taxable income or taxes payable in a future year. <u>An operating loss carryforward</u> is an excess of tax deductions over gross income in a year; a <u>tax credit carryforward</u> is the amount by which tax credits available for utilization exceed statutory limitations.

Problem No. 1. Convert to Accrual

Year-end balances in:	2016	2017
Customer Accounts Receivable	$100,000	$120,000
Accounts Payable-Operating Expense	$10,000	$7,000
Cash basis net income		
Revenue	$900,000	$990,000
Expenses	(770,000)	(790,000)
Net Income (cash basis)	$130,000	$200,000
Convert to accrual basis		
Adjust for accounts receivable		
Adjust for accounts payable		
Accrual Basis Net Income		

Problem No. 2. Compare

Compare Accrual & Cash Basis in Year 1.	Amount	Which to be higher? Cash Basis Net Income	Which to be higher? Accrual Net Income
Revenue			
Earn revenue in Year 1, collect in Year 2	$100,000		
Collect revenue in Year 1, earn in Year 2	$100,000		
Expense			
Incur expense in Year 1, pay in Year 2	$100,000		
Prepay expense in Year 1, incur in Year 2	$100,000		
Deferred revenue increases in Year 1	$100,000		

Problem No. 3. Deferred Rental Income

Realty Company, Inc.	Facts	Year 1 GAAP	Year 1 Tax Return
Corp. bond interest income each year	$100,000	$100,000	
Cost of office building (40 Years, S/L)	$400,000		
Building rented to IBM for:	3 Years		
Rental charge to IBM per year	$25,000		
Cash received from IBM in Year 1	$75,000		
Rent Revenue (3 years @ $25,000 per year)		$25,000	
Building depreciation per yr -S/L- GAAP	$10,000	($10,000)	
Building depreciation per yr -S/L- TAX	$10,000		
Property Tax & Insurance-Year 1	$8,000	($8,000)	
GAAP income before Tax-Year 1		$107,000	
Taxable income-Year 1 (tax rate is 40%)			
(Difference in GAAP & TAXable income is $50,000 for year 1)			
Income Tax Expense and Income Tax Payable - Yr. 1			
Current Income Tax Expense (or Benefit)			
Current Income Tax Payable (or Receivable)			
Deferred income tax expense or (or benefit)			
Deferred income tax asset or (or liability)			

Problem No. 1. Convert to Accrual

Year-end balances in:	2016	2017
Customer Accounts Receivable	$100,000	$120,000
Accounts Payable-Operating Expense	$10,000	$7,000
Cash basis net income		
Revenue	$900,000	$990,000
Expenses	(770,000)	(790,000)
Net Income (cash basis)	$130,000	$200,000
Convert to accrual basis		
Adjust for accounts receivable	$100,000	$20,000
Adjust for accounts payable	($10,000)	$3,000
Accrual Basis Net Income	$220,000	$223,000

Problem No. 2. Compare

Compare Accrual & Cash Basis in Year 1.	Amount	Which to be higher? Cash Basis Net Income	Accrual Net Income
Revenue			
Earn revenue in Year 1, collect in Year 2	$100,000		X
Collect revenue in Year 1, earn in Year 2	$100,000	x	
Expense			
Incur expense in Year 1, pay in Year 2	$100,000	x	
Prepay expense in Year 1, incur in Year 2	$100,000		x
Deferred revenue increases in Year 1	$100,000	x	

Problem No. 3. Deferred Rental Income

Realty Company, Inc.	Facts	Year 1 GAAP	Year 1 Tax Return
Corp. bond interest income each year	$100,000	$100,000	$100,000
Cost of office building (40 Years, S/L)	$400,000		
Building rented to IBM for:	3 Years		
Rental charge to IBM per year	$25,000		
Cash received from IBM in Year 1	$75,000		
Rent Revenue (3 years @ $25,000 per year)		$25,000	$75,000
Building depreciation per yr -S/L- GAAP	$10,000	($10,000)	
Building depreciation per yr -S/L- TAX	$10,000		($10,000)
Property Tax & Insurance-Year 1	$8,000	($8,000)	($8,000)
GAAP income before Tax-Year 1		$107,000	
Taxable income-Year 1 (tax rate is 40%)			$157,000
(Difference in GAAP & TAXable income is $50,000 for year 1)			
Income Tax Expense and Income Tax Payable - Yr. 1		$42,800	$62,800
Current Income Tax Expense (or Benefit)		$62,800	
Current Income Tax Payable (or Receivable)			$62,800
Deferred income tax expense or (or benefit)			$20,000
Deferred income tax asset or (or liability)		$20,000	

Use the following information for the next four questions for Great Company.

[Text Pg. 1-20] Great Company collects cash for revenue before the revenue is earned.
When cash is collected, the company debits cash and credits unearned revenue.
At the end of an accounting period, the company adjusts the books by moving the appropriate amount from the unearned revenue account to the earned revenue account.
The company provided the following information for 2016.

Unearned Revenue	**Balance-January 1, 2016**	**$20,000**
Unearned Revenue	**Balance-December 31, 2016**	**$30,000**
Collection of Revenue	**All of 2016**	**$100,000**

1 Assume that Great Company enters into one-year "service contracts" for all of its customers, and collects the revenue at the start of the year covered by each contract.
How much revenue is reported on the federal corporate income tax return for 2016?

a. $0 b. $90,000 c. $100,000 d. $110,000 e. Other

2 Assume that Great Company rents office space to local businesses.
Great Company enters into one-year "rental contracts" for all of its tenants, and collects the revenue at the start of the year covered by each contract.
How much revenue is reported on the federal corporate income tax return for 2016?

a. $0 b. $90,000 c. $100,000 d. $110,000 e. Other

3 Continue to assume that Great Company rents office space to local businesses.
What is the balance in the deferred tax asset or a deferred tax liability at the end of 2016?

a. $6,000 b. $10,000 c. $25,000 d. $12,000 e. Other

4 Great Company is in the business of renting office space to local businesses.
Does Great Company have a deferred tax asset or a deferred tax liability at the end of 2016?

a. Asset b. Liability c. Cannot Determine

See T accounts and other questions on the next page, related to the problem above.

Great Company - Unearned Income

Great Company collects cash for revenue before that revenue is earned.
When cash is collected, the company debits cash and credits unearned revenue.
At the end of an accounting period, the company adjusts the books by moving the appropriate amount from the unearned revenue account to the earned revenue account.
The company uses the accrual method, and provided the following information for 2016.

Collection of Revenue	In 2016	$100,000
Unearned Revenue	Beg-Bal	$20,000
Unearned Revenue	End-Bal	$30,000

	Balance Sheet				Income Statement			
Amounts in $000	Cash		Deferred Revenue		Earned Revenue			
Beginning Balance	???							
Rent collected								
Adjusting Entry								
Ending Balance								

1 Assume that Great Company is in the business of renting office space to local businesses. **(Text pg 1-20)**
Great Company enters into one-year "rental contracts" for all of its tenants,
and collects the revenue at the start of the year covered by each contract.
How much revenue is reported on Great Company's accrual basis GAAP financial statements for 2016?
a. $0 b. $90,000 c. $100,000 d. $110,000

2 Assume that Great Company is in the business of renting office space to local businesses. **(Text pg 1-20)**
Great Company enters into one-year "rental contracts" for all of its tenants,
and collects the revenue at the start of the year covered by each contract.
How much revenue is reported on Great Company's federal corporate income tax return for 2016?
a. $0 b. $90,000 c. $100,000 d. $110,000

3 Assume Great Company enters into one-year "service contracts" for all of its customers, **(Text pg 1-20)**
and collects the revenue at the start of the year covered by each contract.
How much revenue is reported on Great Company's federal corporate income tax return for 2016?
a. $0 b. $90,000 c. $100,000 d. $110,000

4 **Company earns income from rental of office space**
Assume that Great Company rents office space to local businesses.
What is the balance in the deferred tax asset or a deferred tax liability at the end of 2016?
a. $6,000 b. $10,000 c. $25,000 d. $12,000

	Beginning	Ending	Increase
Deferred Revenue			
Future tax rate			
Deferred tax asset			

How much is the deferred income tax benefit for the current year? ______

5 **Company earns income from rental of office space**
Does Great Company have a deferred tax asset or a deferred tax liability at the end of 2016?
a. Asset b. Liability c. Cannot determine

Great Company - Unearned Income

Great Company collects cash for revenue before that revenue is earned.
When cash is collected, the company debits cash and credits unearned revenue.
At the end of an accounting period, the company adjusts the books by moving the appropriate amount from the unearned revenue account to the earned revenue account.
The company uses the accrual method, and provided the following information for 2016.

Collection of Revenue	In 2016	$100,000
Unearned Revenue	Beg-Bal	$20,000
Unearned Revenue	End-Bal	$30,000

	Balance Sheet				Income Statement			
Amounts in $000	Cash		Deferred Revenue		Earned Revenue			
Beginning Balance	???			20				
Rent collected	100			100				
Adjusting Entry			90			90		
Ending Balance				30				

1 **B** Assume that Great Company is in the business of renting office space to local businesses. **(Text pg 1-20)**
Great Company enters into one-year "rental contracts" for all of its tenants,
and collects the revenue at the start of the year covered by each contract.
How much revenue is reported on Great Company's accrual basis GAAP financial statements for 2016?
a. $0 b. $90,000 c. $100,000 d. $110,000

Company receiving rental income before it is earned must report GAAP income in year earned.
Recognize $20,000 of revenue deferred from 2015, and $70,000 received and earned in 2016.

2 **C** Assume that Great Company is in the business of renting office space to local businesses. **(Text pg 1-20)**
Great Company enters into one-year "rental contracts" for all of its tenants,
and collects the revenue at the start of the year covered by each contract.
How much revenue is reported on Great Company's federal corporate income tax return for 2016?
a. $0 b. $90,000 c. $100,000 d. $110,000

Company receiving rental income before it is earned must report the income in year received
Amount of recognized income: $100,000

3 **B** Assume Great Company enters into one-year "service contracts" for all of its customers, **(Text pg 1-20)**
and collects the revenue at the start of the year covered by each contract.
How much revenue is reported on Great Company's federal corporate income tax return for 2016?
a. $0 b. $90,000 c. $100,000 d. $110,000

For a service contract, company defers income on tax return in same way as in GAAP statements
Amount of recognized income: $90,000

4 **D** **Company earns income from rental of office space**
Continue to assume that Great Company rents office space to local businesses.
What is the balance in the deferred tax asset or a deferred tax liability at the end of 2016?
a. $6,000 b. $10,000 c. $25,000 d. $12,000

	Beginning	Ending	Increase
Deferred Revenue	20,000	30,000	
Future tax rate	40%	40%	
Deferred tax asset	8,000	12,000	4,000

How much is the deferred income tax benefit for the current year? 4,000

5 **A** **Company earns income from rental of office space**
Does Great Company have a deferred tax asset or a deferred tax liability at the end of 2016?
a. Asset b. Liability c. Cannot determine

Questions to Answer when Working Problems Involving Accounting for Income Tax

We have a trial balance, **an income statement, or other set accounts.**	**Bad Debts Expense**	**Deferred Income**	**Warranty Expense**
We should be able to answer these questions.			
1. What is GAAP net income before income tax?			
2. What adjustment is needed to move from "GAAP net income before tax" to **"taxable income?"**			
3. What is the amount of taxable income for the year?			
4. What is the amount of current income tax expense? Journal entry?			
5. Does a book-tax adjustment involve an asset or liability account that has a "GAAP basis" that is different from the "TAX basis?"			
6. Will a difference in basis (of an asset or liability) result in a FUTURE **"deductible amount"** or **"taxable amount"** --- which makes it necessary for the company to recognize a **"deferred tax asset"** or **"deferred tax liability"** (or adjust the balance in an EXISTING deferred tax asset or liability account)?			
7. What is the balance in the deferred tax asset or liability at the end of the year? How is the change in balance reflected in journal entry for deferred income tax expense or benefit?			
[If deferred tax asset or liability had a beginning balance (originating in a prior year) the focus is on the change in the balance during the year, not on the amount of the ending balance.			
8. When considering a deferred tax asset, it is necessary to determine if a valuation allowance account should be established, or adjusted.			

ANN Corporation - Depreciation Expense

ANN Corp. (organized in 2016) - service revenue each year:	$200,000
Operating expenses (other than depreciation) each year:	$110,000
ANN bought a machine (3-year life) on January 1, 2016. Cost:	$30,000
Depreciation in financial statements each year (St. Line method):	$10,000
Entire cost of machine is deducted on 2016 tax return.	$30,000

Assume 40% federal income tax rate. There is no state income tax.

GAAP Financial Statements	2016	2017	2018
Service Revenue	200,000	200,000	200,000
Depreciation expense (3-year life)	(10,000)	(10,000)	(10,000)
Other Expenses	(110,000)	(110,000)	(110,000)
Net Income Before Tax	80,000	80,000	80,000
Tax Expense-40% rate			
Net income after tax			

Tax Return Computations			
Net Income Before Tax (above)	80,000	80,000	80,000
Adjust for Depreciation expense			
Taxable Income			
Income tax rate	40%	40%	40%
Current Tax Expense			

GAAP Depreciation - 2016			
Depreciation Expense			
Accumulated Depreciation			
GAAP Depreciation - 2017 and 2018			
Depreciation Expense			
Accumulated Depreciation			
Depreciation-Tax Work Papers - 2016			
Depreciation Expense			
Accumulated Depreciation			
Depreciation-Tax Work Papers - 2017 & 2018			
Depreciation Expense			
Accumulated Depreciation			
Entry for Tax Provision - 2016			
Current income tax expense			
Deferred income tax expense (benefit)			
Current income tax payable			
Deferred income tax liability			
Entry for Tax Provision - 2017			
Current income tax expense			
Deferred income tax expense (benefit)			
Current income tax payable			
Deferred income tax liability			

Solution will be different if tax rate is different in 2018 and/or 2018.

ANN Corporation - Depreciation Expense

ANN Corp. (organized in 2016) - service revenue each year:	$200,000
Operating expenses (other than depreciation) each year:	$110,000
ANN bought a machine (3-year life) on January 1, 2016. Cost:	$30,000
Depreciation in financial statements each year (St. Line method):	$10,000
Entire cost of machine is deducted on 2016 tax return.	$30,000

Assume 40% federal income tax rate. There is no state income tax.

GAAP Financial Statements	2016	2017	2018
Service Revenue	200,000	200,000	200,000
Depreciation expense (3-year life)	(10,000)	(10,000)	(10,000)
Other Expenses	(110,000)	(110,000)	(110,000)
Net Income Before Tax	80,000	80,000	80,000
Tax Expense-40% rate	(32,000)	(32,000)	(32,000)
Net income after tax	48,000	48,000	48,000
Tax Return Computations			
Net Income Before Tax (above)	80,000	80,000	80,000
Adjust for Depreciation expense	(20,000)	10,000	10,000
Taxable Income	60,000	90,000	90,000
Income tax rate	40%	40%	40%
Current Tax Expense	24,000	36,000	36,000

GAAP Depreciation - 2016		
Depreciation Expense	10,000	
Accumulated Depreciation		10,000
GAAP Depreciation - 2017 and 2018		
Depreciation Expense	10,000	
Accumulated Depreciation		10,000
Depreciation-Tax Work Papers - 2016		
Depreciation Expense	30,000	
Accumulated Depreciation		30,000
Depreciation-Tax Work Papers - 2017 & 2018		
Depreciation Expense	0	
Accumulated Depreciation		0
Entry for Tax Provision - 2016		
Current income tax expense	24,000	
Deferred income tax expense (benefit)	8,000	
Current income tax payable		24,000
Deferred income tax liability		8,000
Entry for Tax Provision - 2017		
Current income tax expense	36,000	
Deferred income tax expense (benefit)		4,000
Current income tax payable		36,000
Deferred income tax liability	4,000	

Solution will be different if tax rate is different in 2018 and/or 2019.

Accrual to Cash Basis

See Text Page 9-27

GAAP Income Statement

Sales		$100,000
Bad debts (provision)	5,000	
Other Expenses (paid in cash)	70,000	
Total Expenses		75,000
Net Income before Taxes		$25,000

Balance Sheet Balances	Begin.	Ending
Accounts Receivable	$80,000	$85,000
Allowance for Bad Debts	$7,000	$4,000

Bad debts expense on tax return	
Taxable Income	
Amount collected from customers?	
Amount of Net Cash Flow-before taxes?	

Please record transactions on the accrual basis in the spaces below.

Accrual to Cash Problem - ($000)

Transaction		Cash		Accounts Rec.		Allow. for Bad Debts	
	Beg. Bal.	XXX		80,000			7,000
1	Sales						
2	Collection						
3	Write-off						
4	Other Exp.						
5	Provision						
	Balance						

Revenue and Expense ($000)

Transaction		Revenue		Other Expense		Bad Debts Expense	
1	Sales						
4	Other Exp.						
5	Provision						

Accrual to Cash Basis

See Text Page 9-27

GAAP Income Statement

Sales		$100,000
Bad debts (provision)	5,000	
Other Expenses (paid in cash)	70,000	
Total Expenses		75,000
Net Income before Taxes		$25,000

Balance Sheet Balances	Begin.	Ending
Accounts Receivable	$80,000	$85,000
Allowance for Bad Debts	$7,000	$4,000

Bad debts expense on tax return	8,000
Taxable Income	22,000
Amount collected from customers?	87,000
Amount of Net Cash Flow-before taxes?	17,000

Please record transactions on the accrual basis in the spaces below.

Accrual to Cash Problem - ($000)

	Transaction	Cash		Accounts Rec.		Allow. for Bad Debts	
	Beg. Bal.	XXX		80,000			7,000
1	Sales			100,000			
2	Collection	87,000			87,000		
3	Write-off				8,000	8,000	
4	Other Exp.		70,000				
5	Provision						5,000
	Totals			180,000	95,000		
	Balance			85,000			4,000

Revenue and Expense ($000)

	Transaction	Revenue		Other Expense		Bad Debts Expense	
1	Sales		100,000				
4	Other Exp.			70,000			
5	Provision					5,000	

BOB Corporation - Accounts Receivable and Uncollectible Accounts

BOB Corp. provided its accrual basis (GAAP) trial balance at the end of its first year of operations (2016) before recording income tax expense. Income tax rate is 40%.

Cash	25,000		
Accounts Receivable	**55,000**		
Allowance for uncollectible accounts		**4,000**	
Equipment-placed in service January 2, 2016	50,000		
Accumulated Dep.-Straight Line- 5 years		10,000	
Accrued Liability		6,000	
Common Stock		80,000	
Retained Earnings			
Repair revenue		200,000	$200,000
Bad debts expense	**7,000**		
Meals & entertainment expense for customers	20,000		
Other Exp. Salaries, supplies, depreciation, etc.	135,000		
Other Expenses	**8,000**		170,000
Totals	**300,000**	**$300,000**	$30,000

All sales are on credit. Provide journal entries for: (1) Revenue, (2) Bad Debts Expense, (3) Write-off of bad debts, and (4) Collections of receivables. What is taxable income?

1	**Accounts Receivable**	**200,000**	
	Sales		**200,000**
2	**Bad Debts Expense**		
	Allowance for Bad Debts		
3	**Allowance for Bad Debts**		
	Accounts receivable		
4	**Cash**		
	Accounts receivable		

Post entries to T Accounts below

Cash		Accounts Receivable		Allow. for Bad Debts	
		1			2
			3	3	
4			4		

Balance Sheet Accts

Bad Debts Expense		Other Expense		Sales	
					1
2					

Income Statement Accounts

Net income before taxes (GAAP)	**$30,000**
Disallowed entertainment expense deduction	
Remove bad debt expense (GAAP)	
Subtract bad debt write-off	
Taxable income	
Difference in GAAP and Tax basis of receivables	
Income tax rate	40%
Deferred income tax balance	

Provision for income tax - 2016

5	**Current Income Tax Expense**		
	Current income tax payable		
6	**Deferred tax asset**		
	Deferred tax benefit		

Net income tax expense

What is the effective tax rate?

BOB Corporation - Accounts Receivable and Uncollectible Accounts

BOB Corp. provided its accrual basis (GAAP) trial balance at the end of its first year of operations (2016) before recording income tax expense. Income tax rate is 40%.

Cash	25,000		
Accounts Receivable	**55,000**		
Allowance for uncollectible accounts		**4,000**	
Equipment-placed in service January 2, 2016	50,000		
Accumulated Dep.-Straight Line- 5 years		10,000	
Accrued Liability		6,000	
Common Stock		80,000	
Retained Earnings			
Repair revenue		200,000	$200,000
Bad debts expense	**7,000**		
Meals & entertainment expense for customers	20,000		
Other Exp. Salaries, supplies, depreciation, etc.	135,000		
Other Expenses	**8,000**		170,000
Totals	**300,000**	**$300,000**	$30,000

All sales are on credit. Provide journal entries for: (1) Revenue, (2) Bad Debts Expense, (3) Write-off of bad debts, and (4) Collections of receivables. What is taxable income?

1	**Accounts Receivable**	**200,000**	
	Sales		**200,000**
2	**Bad Debts Expense**	**7,000**	
	Allowance for Bad Debts		**7,000**
3	**Allowance for Bad Debts**	**3,000**	
	Accounts receivable		**3,000**
4	**Cash**	**142,000**	
	Accounts receivable		**142,000**

Post entries to T Accounts below

Cash

4	142,000		

Accounts Receivable

1	200,000		
		3	3,000
		4	142,000

Allow. for Bad Debts

		2	7,000
3	3,000		

Balance Sheet Accts

Bad Debts Expense

2	7,000		

Other Expense

Sales

		1	200,000

Income Statement Accounts

Net income before taxes (GAAP)	**$30,000**
Disallowed entertainment expense deduction	10,000
Remove bad debt expense (GAAP)	7,000
Subtract bad debt write-off	(3,000)
Taxable income	**$44,000**
Difference in GAAP and Tax basis of receivables	$4,000
Income tax rate	40%
Deferred income tax balance	**$1,600**

Provision for income tax - 2016

5	**Current Income Tax Expense**	**17,600**	
	Current income tax payable		**17,600**
6	**Deferred tax asset**	**1,600**	
	Deferred tax benefit		**1,600**

Net income tax expense **16,000**

What is the effective tax rate?

CARL Corporation - Accounting for Rent Received in Advance

CARL Corp. (organized in 2016) - service revenue each year:		$200,000
On 1-2-2016, received full rent payment on 3-yr. contract:	30,000	
Amount of rent revenue recognized each year (GAAP):		10,000
Operating expenses each year:		(130,000)
Net income before federal income taxes for 2016		$80,000

Assume 40% federal income tax rate. There is no state income tax.

GAAP Financial Statements	2016	2017	2018
Service Revenue	200,000	200,000	200,000
Rent revenue ($30,000 for 3 years)	10,000	10,000	10,000
Operating Expenses	(130,000)	(130,000)	(130,000)
Net Income Before Tax	80,000	80,000	80,000
Tax Expense-40% rate			
Net income after tax			
Tax Return Computations			
Net Income Before Tax (above)	80,000	80,000	80,000
Adjust for rent revenue			
Taxable Income			
Income tax rate			
Current Tax Expense			

Record Collection of Rent Revenue - 2016		
Cash		
Earned Rent Revenue		
Unearned rent revenue		
Adjust Unearned Rent Revenue- 2018 and 2018		
Unearned rent revenue		
Earned Rent Revenue		
Rent Revenue-Tax Work Papers - 2016		
Cash		
Rent Revenue		
Rent Revenue-Tax Work Papers - 2017 & 2018		
Cash		
Rent Revenue		

Entry for Income Tax Provision - 2016			
Current income tax expense	Income Statement		
Current income tax payable	Balance Sheet		
Deferred income tax asset	Balance Sheet		
Deferred income tax expense (benefit)	Income Statement		

Entry for Income Tax Provision - 2017 & 2018			
Current income tax expense	Income Statement		
Current income tax payable	Balance Sheet		
Deferred income tax expense (benefit)	Income Statement		
Deferred income tax asset	Balance Sheet		

What is the balance of the deferred tax asset at the end of 2017?

What journal entries above should be made if tax rate will be 30% in 2015 & 2016?

CARL Corporation - Accounting for Rent Received in Advance

CARL Corp. (organized in 2016) - service revenue each year:		$200,000
On 1-2-2016, received full rent payment on 3-yr. contract:	30,000	
Amount of rent revenue recognized each year (GAAP):		10,000
Operating expenses each year:		(130,000)
Net income before federal income taxes for 2016		$80,000

Assume 40% federal income tax rate. There is no state income tax.

GAAP Financial Statements	2016	2017	2018
Service Revenue	200,000	200,000	200,000
Rent revenue ($30,000 for 3 years)	10,000	10,000	10,000
Operating Expenses	(130,000)	(130,000)	(130,000)
Net Income Before Tax	80,000	80,000	80,000
Tax Expense-40% rate	(32,000)	(32,000)	(32,000)
Net income after tax	48,000	48,000	48,000
Tax Return Computations			
Net Income Before Tax (above)	80,000	80,000	80,000
Adjust for rent revenue	20,000	(10,000)	(10,000)
Taxable Income	100,000	70,000	70,000
Income tax rate	40%	40%	40%
Current Tax Expense	40,000	28,000	28,000

Record Collection of Rent Revenue - 2016		
Cash	30,000	
Earned Rent Revenue		10,000
Unearned rent revenue		20,000
Adjust Unearned Rent Revenue- 2018 and 2018		
Unearned rent revenue	10,000	
Earned Rent Revenue		10,000
Rent Revenue-Tax Work Papers - 2016		
Cash	30,000	
Rent Revenue		30,000
Rent Revenue-Tax Work Papers - 2017 & 2018		
Cash	0	
Rent Revenue		0

Entry for Income Tax Provision - 2016			
Current income tax expense	Income Statement	40,000	
Current income tax payable	Balance Sheet		40,000
Deferred income tax asset	Balance Sheet	8,000	
Deferred income tax expense (benefit)	Income Statement		8,000

Entry for Income Tax Provision - 2017 & 2018			
Current income tax expense	Income Statement	28,000	
Current income tax payable	Balance Sheet		28,000
Deferred income tax expense (benefit)	Income Statement	4,000	
Deferred income tax asset	Balance Sheet		4,000

What is the balance of the deferred tax asset at the end of 2017? 4,000

What journal entries above should be made if tax rate will be 30% in 2015 & 2016?

DANA Company Information, 2016.

Balances at end of first year. Income tax rate of 40%.

	Cash	60,000	
2	Machine - Bought January 2, 2016	50,000	
3	Accumulated Depreciation-S.L.- 5 years		10,000
6, 7	Warranty Liability		12,000
1	Common Stock		28,000
	Retained Earnings		
4	Repair revenue (all collected in cash)		200,000
5	Salaries, etc.	112,000	
3	Depreciation expense	10,000	
6	Warranty Expense	18,000	
	Totals	250,000	250,000

How much did the company spend on warranty claims during the year?	
What is the warranty expense deduction?	
Warranty expense is the only expense with a different balance using GAAP and Tax rules. What is taxable income?	

GAAP Net Income before tax	$60,000
Adjust warranty expense	
Taxable Income	
Tax rate	
Income tax due with return	

Provide journal entry for warranty provision

Warranty Expense		
Warranty liability		

Provide journal entry for warranty payments

Warranty liability		
Cash		

What is the balance in the deferred tax asset or deferred tax liability at the end of the first year?

GAAP Balance in Warranty Liability	12,000
Tax Balance in Warranty Liability	
Difference GAAP and Tax basis	
Tax rate in the future	
Deferred Tax Asset or Liability?	

Provide journal entry for current income tax expense (benefit).

Current income tax expense (benefit)		
Current income tax payable		

Provide journal entry for deferred income tax expense (benefit).

Deferred income tax asset		
Deferred income tax expense (benefit)		

What is the amount of net income tax expense?	
What is the effective income tax rate?	

Entries for common stock sale, purchase of machine, and operating revenue & expense.

Cash

1	28,000		
4	200,000	2	50,000
		5	112,000
		7	6,000

Machine

2	50,000		

Accum Deprec.

		3	10,000

Warranty Liability

		6	18,000
7	6,000		

Common Stock

		1	28,000

Retained Earn.

Repair Revenue

		4	200,000

Depreciation Expense

3	10,000		

Warranty Expense

6	18,000		

Salary Expenses, etc.

5	112,000		

Please confirm the accuracy of the T account entries above.

Trace numbers in T accounts to trial balance above.

DANA Company Information, 2016.

Balances at end of first year. Income tax rate of 40%.

	Cash	60,000	
2	Machine - Bought January 2, 2016	50,000	
3	Accumulated Depreciation-S.L.- 5 years		10,000
6, 7	Warranty Liability		12,000
1	Common Stock		28,000
	Retained Earnings		
4	Repair revenue (all collected in cash)		200,000
5	Salaries, etc.	112,000	
3	Depreciation expense	10,000	
6	Warranty Expense	18,000	
	Totals	250,000	250,000

How much did the company spend on warranty claims during the year?	$6,000
What is the warranty expense deduction?	$6,000
Warranty expense is the only expense with a different balance using GAAP and Tax rules. What is taxable income?	$72,000

GAAP Net Income before tax	$60,000
Adjust warranty expense	12,000
Taxable Income	72,000
Tax rate	40%
Income tax due with return	$28,800

Provide journal entry for warranty provision

Warranty Expense	18,000	
Warranty liability		18,000

Provide journal entry for warranty payments

Warranty liability	6,000	
Cash		6,000

What is the balance in the deferred tax asset or deferred tax liability at the end of the first year?

GAAP Balance in Warranty Liability	12,000
Tax Balance in Warranty Liability	0
Difference GAAP and Tax basis	12,000
Tax rate in the future	40%
Deferred Tax Asset or Liability?	4,800

Provide journal entry for current income tax expense (benefit).

Current income tax expense (benefit)	$28,800	
Current income tax payable		$28,800

Provide journal entry for deferred income tax expense (benefit).

Deferred income tax asset	$4,800	
Deferred income tax expense (benefit)		$4,800

What is the amount of net income tax expense?	$24,000
What is the effective income tax rate?	40%

Entries for common stock sale, purchase of machine, and operating revenue & expense.

Cash

1	28,000		
4	200,000	2	50,000
		5	112,000
		7	6,000

Machine

2	50,000		

Accum Deprec.

		3	10,000

Warranty Liability

		6	18,000
7	6,000		

Common Stock

		1	28,000

Retained Earn.

Repair Revenue

		4	200,000

Depreciation Expense

3	10,000		

Warranty Expense

6	18,000		

Salary Expenses, etc.

5	112,000		

Please confirm the accuracy of the T account entries above.

Trace numbers in T accounts to trial balance above.

ELLEN Corporation began in 2016. It sells equipment with a 3-year warranty.
ELLEN estimates that it will have warranty expense of 10% of sales.
ELLEN will accrue repair expense of 20% of sales each year.
Warranty costs will be incurred equally in second and third year after sale.
ELLEN will spend $10,000 in 2017 & $10,000 in 2018 -- related to 2016 sales.

GAAP Financial Reports	2016	2017	2018
Sales	200,000	200,000	200,000
Cost of sales and expenses	(100,000)	(100,000)	(100,000)
Estimated Warranty Expense	(20,000)	(20,000)	(20,000)
Net Income Before Tax	80,000	80,000	80,000
Income tax rate-40%	40%	40%	40%
Tax Expense- using 40% rate			
Tax Return			
Net Income Before Tax (above)	80,000	80,000	80,000
Adjust for warranty expense	20,000	10,000	0
Taxable Income	100,000	90,000	80,000
Income tax rate	40%	40%	40%
Current Tax Expense			

GAAP Books	2016	2017	2018
Warranty liability - Beginning			
Warranty Expense accrual			
Subtotal			
Actually warranty payments			
Warranty liability - Ending			

GAAP Warranty Expense - 2016			
Warranty Expense			
Warranty Liability			
Warranty Payments - 2016	**None**		
GAAP Warranty Expense - 2017			
Warranty Expense			
Warranty Liability			
Warranty Payments - 2017	**10,000**		
Warranty Liability			
Cash			
Entry for Tax Provision - 2016			
Current income tax expense			
Current income tax payable			
Deferred income tax asset			
Deferred income tax expense (benefit)			
Entry for Tax Provision - 2017			
Current income tax expense			
Current income tax payable			
Deferred income tax asset			
Deferred income tax expense (benefit)			

Solution will be different if tax rate is different in 2017 and/or 2018.

ELLEN Corporation began in 2016. It sells equipment with a 3-year warranty.
ELLEN estimates that it will have warranty expense of 10% of sales.
ELLEN will accrue repair expense of $20,000 for 2016 sales.
Warranty costs will be incurred equally in second and third year after sale.
ELLEN will spend $10,000 in 2017 & $10,000 in 2018 -- related to 2016 sales.

GAAP Financial Reports	2016	2017	2018
Sales	200,000	200,000	200,000
Cost of sales and expenses	(100,000)	(100,000)	(100,000)
Estimated Warranty Expense	(20,000)	(20,000)	(20,000)
Net Income Before Tax	80,000	80,000	80,000
Income tax rate-40%	40%	40%	40%
Tax Expense- using 40% rate	32,000	32,000	32,000

Tax Return			
Net Income Before Tax (above)	80,000	80,000	80,000
Adjust for warranty expense	20,000	10,000	0
Taxable Income	100,000	90,000	80,000
Income tax rate	40%	40%	40%
Current Tax Expense	40,000	36,000	32,000

GAAP Books	2016	2017	2018
Warranty liability - Beginning	0	20,000	30,000
Warranty Expense accrual	20,000	20,000	20,000
Subtotal	20,000	40,000	50,000
Actually warranty payments	0	10,000	20,000
Warranty liability - Ending	20,000	30,000	30,000

GAAP Warranty Expense - 2016			
Warranty Expense		20,000	
Warranty Liability			20,000
Warranty Payments - 2016	**None**		
GAAP Warranty Expense - 2017			
Warranty Expense		20,000	
Warranty Liability			20,000
Warranty Payments - 2017	**10,000**		
Warranty Liability		10,000	
Cash			10,000
Entry for Tax Provision - 2016			
Current income tax expense		40,000	
Current income tax payable			40,000
Deferred income tax asset		8,000	
Deferred income tax expense (benefit)			8,000
Entry for Tax Provision - 2017			
Current income tax expense		36,000	
Current income tax payable			36,000
Deferred income tax asset		4,000	
Deferred income tax expense (benefit)			4,000

Solution will be different if tax rate is different in 2017 and/or 2018.

FRAN CORPORATION. Accounting for Warranty Expense

Balance Sheet	December 31, 2016		Income Statement-2016		
Cash		$90,000	Revenue		$200,000
Accounts Receivable		40,000	Expenses		
Other current asset			Salaries Expense	78,000	
Equipment (5-year life)	60,000		Supplies Expense	11,000	
Accumulated Depreciation	(12,000)	48,000	Depreciation Expense	12,000	
Deferred Income Tax Asset	3,200	3,200	Warranty Expense	10,000	
Total Assets		$181,200	Other Expense/Loss	39,000	
Accounts Payable	$20,000		Total Expense		150,000
Warranty Liability	$8,000		Net Income before Tax		50,000
Current Income Tax Payable	23,200		Current Income Tax Expense	23,200	
Deferred Income Tax Liability			Deferred Income Tax Benefit	(3,200)	20,000
Total Liabilities		51,200	Net Income after tax (loss)		$30,000
Common Stock ($10 Par)	100,000		Retained Earnings - Begin. Balance		0
Retained Earnings	30,000		Subtotal		30,000
Stockholders' Equity		130,000	Less: Dividends Declared and Paid		0
Total Liabilities & Equity		$181,200	Retained Earnings - Ending Balance		$30,000

LOCUST Corp. was organized on January 1, 2016. There is no state income tax.

For simplicity, assume this company has a federal income tax rate of 40% now and in future.

Company records warranty expense and liabilty for 5% of sales ($10,000 in the first year).

Company paid warranty costs of $2,000 in current year.

Company expects to pay future warranty costs of $8,000 ($2,000 per year in each of the next four years).

One deferred tax asset & one liability are shown. (Usually reported in Current & Non-current accounts.)

1. What is the amount of income tax expense (GAAP income tax expense)?
2. What is "taxable income" for the year, and "current income tax liability?"
3. What is the total amount of deferred asset or liability?

1. <u>Income Tax Expense per Books - GAAP?</u>		
Net income before income tax above	$50,000	
Temporary differences in 2016	N/A	
Permanent differences in 2016	None	
Base for computing Book Income Tax Expense	$50,000	
Tax rate for 2016	40%	
Book (GAAP) Income Tax Expense for 2016	$20,000	
2. <u>Net income before income tax (above)</u>	$50,000	
Remove warranty expense, not yet paid (undeduct)	$8,000	Temporary
"<u>Taxable Income</u>" for 2016	$58,000	
Income tax rate for 2016	40%	
"<u>Current income tax liability for 2016</u>"	$23,200	
3. <u>Balance of deferred tax assets or liabilities?</u>		
Ending GAAP basis in warranty liability	$8,000	
Ending tax basis in warranty liability	$0	
Difference in basis (also future deductible amount)	$8,000	
Future tax impact of future deductible amount-40%	$3,200	

In 2017, when Locust pays $2,000 of these accrued warranty costs, warranty liability (not warranty expense) will be debited-for GAAP purposes. For Tax Purposes, the payment will be a deductible "warranty expense" for 2017.

Current GAAP-Tax Differences & the Future Impact		Tax Rate	Deferred Tax
Future tax adjustment to GAAP earnings	$8,000	40%	$3,200
Ending deferred tax asset			$3,200

Approach in no. 1 above is a short-cut that works when simplifying assumptions are made. Income tax expense is: (1) current income tax expense of $23,200, plus (*<u>or minus</u>*) (2) deferred income tax expense (*<u>or benefit</u>*) of ($3,200).

	GAAP Books		Tax Books (workpapers)	
	Dr.	Cr.	Dr.	Cr.
Record warranty liability in 2016				
Warranty Expense	10,000			
Warranty Liability		10,000		
Pay warrenty costs in 2016				
Warranty Liability	2,000			
Warranty Expense			2,000	
Cash		2,000		2,000
Record warranty payments for 2016 (in 2017, 2018, 2019, 2020)				
Warranty Liability	2,000			
Warranty Expense			2,000	
Cash		2,000		2,000
Tax Provision - 2016				
Current income tax expense	23,200			
Deferred income tax Benefit		3,200		
Current income tax liability		23,200		
Deferred income tax asset	3,200			
(Provision for income tax is sum (or net) of first two accounts.)				
(First two accounts are income statement accounts				
and last two are balance sheet accounts.)				
Pay income tax for 2016				
Current income tax liability	23,200			
Cash		23,200		

Selected Sentences Bank of America Annual Report

There are two components of income tax expense: current and deferred.

Current income tax expense reflects taxes to be paid or refunded for the current period.

Deferred income tax expense results from changes in deferred tax assets and liabilities between periods.

These gross deferred tax assets and liabilities represent decreases or increases in taxes expected to be paid in the future because of future reversals of temporary differences in the bases of assets and liabilities as measured by tax laws and their bases as reported in the financial statements.

Deferred tax assets are also recognized for tax attributes such as net operating loss carryforwards and tax credit carryforwards.

Valuation allowances are recorded to reduce deferred tax assets to the amounts management concludes are more-likely-than-not to be realized.

CORPORATE BOOK-TAX DIFFERENCES.

Book income may differ from taxable income from many types of transactions.

Permanent differences

A.	**Some book income is never taxed for regular tax (AMT not relevant here).**	
	1 Tax-exempt interest received on state and municipal obligations	**103**
	2 Life insurance proceeds received by corporation on employee, at death	**101**
B.	**Some book expenses are never deductible on the tax return.**	
	3 Expenses incurred in earning tax-exempt interest	**265**
	4 Corporate payment of premiums for life insurance on officers or key employees	**264**
	5 Fines and expenses resulting from a violation of law	
	6 Disallowed travel and entertainment costs	**274(k)**
	7 Political contributions	**162(e)**
	8 Federal income taxes per books, which is based on GAAP (SFAS No. 109)	**1.164-2(a)**
C.	**Some tax deductions are never reported as expenses in GAAP statements.**	
	9 The dividends-received deduction	**243**
	10 The U.S. production activities deduction	**199**
	11 Percentage depletion of natural resources in excess of their cost	

Temporary differences

D.	**Some revenues or gains are included in GAAP income in the current year but not reported on the tax return until later years.**	
	12 Installment sales reported in full for book purposes in the year of sale. Reported over a period of years using the installment method for tax purposes	**453**
	13 Gains-involuntary conversions recognized for GAAP but Tax deferred	**1033**
E.	**Some revenues or gains are taxable before they are included in GAAP income. These items are included in taxable income when received but are included in GAAP income as they accrue.**	
	14 Prepaid rent or interest income (Revenue received this year, earned in future)	**1.451-1(a)**
	15 Advance subscription revenue	
F.	**Some expenses or losses are deductible on the tax return later than they are included in GAAP income.**	
	16 Excess of capital losses over capital gains are expensed in GAAP income statement in loss year (carried back or over to other years for tax purposes)	**1211, 12**
	17 Book depreciation in excess of tax depreciation	**168**
	18 Charitable contributions exceeding the 10% of taxable income limitation, (currently expensed for book purpose but carried over for tax purposes)	**170(b)(2)**
	19 Bad debt accruals using the allowance method for book purposes and the direct write-off method for tax purposes	**166**
	20 Organizational and start-up expenditures, expensed currently for book purposes but partially deducted and amortized for tax purposes	**248** **195**
	21 Product warranty liabilities expensed for GAAP in year of sale but deducted on tax return when the liability is fixed (generally when repair is required)	**1.461-1(a)(2)**
	22 Net operating losses (NOLs) (for tax) carry back 2 years & carry over 20 years	**172**
G.	**Some expenses or losses are deductible on the tax return before they are deducted on the GAAP income statements**	
	23 Tax depreciation in excess of book depreciation	**168**
	24 Prepaid expenses deducted on the tax return in the period paid, but accrued over a period of years for book purposes	

Group D and G items create deferred tax liabilities.

Group E and F items create deferred tax assets.

	Cash		Accts Receivable		Allow. for Bad Debt		Inventory	
Beginning Balance								
Totals								
Balance								

	Property		Accum. Deprec				Def. Tax Asset	
Beginning Balance								
Totals								
Balance								

			Def. Tax Liab.		Stock		Ret. Earn.	
Beginning Balance								
Totals								
Balance								

	Revenue		Operating Expenses		Current Income Tax (Benefit)		Deferred Income Tax (Benefit)	
Beginning Balance		0	0		0	0	0	0
Totals								
Balance								