

# Advanced Individual Income Tax Test No. 1.

Summer, 2017. June 5, 2017. The University of North Carolina at Charlotte.

Name \_\_\_\_\_ Test No. \_\_\_\_\_

INSTRUCTIONS: You may use your textbook and other notes or materials during the test. A question may cover material from more than one chapter. Avoid all appearances of impropriety.

**The current tax year is 2017, unless a question specifies another tax year. Ignore additional taxes under the Affordable Care Act (often called ObamaCare). Answer may be rounded to nearest dollar.**

1. Which of the following is **not** a *from* AGI deduction?  
a. Standard deduction    b. Medical expense    c. Personal exemption    d. Moving expense
2. Mary will: (1) buy a machine for her proprietorship on December 31, 2016, or (2) buy the machine on January 1, 2017. She will claim a depreciation deduction of \$10,000 in the year of acquisition. With the new machinery, business income will rise and the marginal rate will increase from 20% in 2016 to 28% in 2017. Her after-tax rate of return is 10%.  
What is the PV of the after-tax cost of the machine if she buys the machine on January 1, 2017?  
[Assume tax saving is realized on the first day of the tax year in which the applicable tax return is filed.]  
a. \$7,407    b. \$7,500    c. \$8,100    d. \$7,455    e. Other
3. An investor now owns corporate bonds that pay 8% interest.  
The investor is considering selling the corporate bonds and buying City of Charlotte bonds.  
What interest rate would he need to earn on City of Charlotte bond in order to realize the same after-tax income? [Assume that Bill's marginal federal income tax rate is 35%, and there is no state income tax.]  
a. 5.2%    b. 10.4%    c. 8%    d. 5.6%    e. Other
4. A single executive has salary income of \$400,000 and adjusted gross income of \$400,000. She has total itemized deductions and exemption of \$20,000 (after all phase-outs). There is no state income tax. What is the amount of her federal income tax liability, before considering other taxes, penalties, and credits?  
a. \$107,198    b. \$108,258    c. \$108,799    d. \$120,251    e. Other
5. Continue preceding question. After preparing the draft income tax return, you discover that the executive also had purchased 1,000 shares of Duke Energy stock on January 2, 2017 at a total cost of \$40,000, and sold all of that stock for net selling price of \$50,000 on December 30, 2017. How much additional income tax will be owed as result of this stock sale?  
a. \$1,500    b. \$2,000    c. \$2,220    d. \$3,300    e. \$3,960

**The following information should be used when answering the next 3 questions.**

A single executive named Jim has no dependent, earns a salary of \$550,000 per year.

Jim has deductions (deductions for AGI, itemized deductions and exemption) of \$40,000, resulting in taxable income of \$510,000 for 2017.

Jim's daughter (Ann, who is single, with no dependent) has gross salary income of \$70,000, and total deductions of \$20,000, resulting in taxable income of \$50,000, before considering a sale of stock.

On January 4, 2017, Jim bought 1,000 shares of Newell Corporation stock at a net cost of \$30 per share. There is no state income tax. The stock is worth \$20 per share on December 30, 2017.

6. Newell Corporation is small business corporation as defined in Section 1244. On December 30, 2017, **Jim** sold the Newell Corporation stock (1,000 shares, at a net selling price of \$20 per share) to an unrelated investor. How much tax does Jim save as a result of this sale?  
a. \$1,188    b. \$1,500    c. \$2,000    d. \$3,960    e. Other

7. Ignore question no. 11. On December 30, 2017, Jim gave the Newell Corporation stock (1,000 shares, with a value of \$20 per share) to Ann. No gift tax was paid. On December 30, 2017, **Ann sold** the Newell Corporation stock (1,000 shares) for a net price of \$20,000. Ann had not made any purchases or sales of investments before 2017.

What will be Ann's after-tax cash flow related to this sale of Newell Corporation stock?

- a. \$21,500.    b. \$20,000    c. \$22,500    d. \$25,000    e. Other

8. Use information above. Assume **Jim** paid \$10 per share, not \$30 per share for the Newell Corporation stock on January 4, 2017. No gift tax was paid.

On December 30, 2017, **Ann sold** the Newell Corporation stock (1,000 shares) for a net price of \$20,000. How much additional federal income tax will **Ann** pay as a result of selling this stock at \$20 per share?

- a. \$1,500    b. \$2,500    c. \$3,500    d. \$0    e. Other

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9. Jane is unmarried and has no children, but provides more than half of her mother's financial support. Jane's mother lives in an apartment across town and has a part-time job earning \$4,000 a year.

Which is the most advantageous filing status available to Jane?

- a. Single    b. Surviving Spouse    c. Head of household    d. Joint

10. In year 1, Harold Weston's wife died. Since her death, he has maintained a household for their two-year-old son Frank, his qualifying child. He has not remarried.

Which is the most advantageous filing status available to Harold in year 1?

- a. Single    b. Surviving Spouse    c. Head of household    d. Joint

11. Robert bought the land for \$80,000, 10 years ago. This year, Robert gave land to his daughter, Roberta. The land had a value of \$100,000 on the date of the gift.

Robert paid gift tax of \$10,000 on the gift. What is Roberta's basis in the land?

- a. \$ 80,000    b. \$ 82,000    c. \$88,000    d. \$100,000    e. Other

12. Wanda was entirely supported by her daughters, Ann, Betty and Barbara who provided this support: Ann 40%; Betty 49%; Barbara 11%

Which sister is entitled to claim Wanda as a dependent, assuming a multiple support agreement exists?

- a. Ann    b. Ann or Betty    c. Betty or Barbara    d. Ann, Betty or Barbara

13. A single, wealthy investor earns net rental income of about \$400,000 per year. She does not have significant itemized deductions. She is considering giving some rental property (that generates net rental income of \$20,000 per year). to her elderly mother so that her mother will have income she needs for her living expenses. The investor expects to save federal income taxes for her family with this plan.

Which tax planning concept applies here?

- a. Step transaction doctrine    b. Timing of income  
b. Changing character of income    d. Income shifting

14. June and John are married with three small children who live with them.

June and John have combined salaries of \$320,000. They have no deductions "for AGI."

The amount of each exemption is \$4,050 for 2017.

What is the amount of their deduction for exemptions on the 2017 federal income tax return?

- a. \$19,035    b. \$11,700    c. \$16,380    d. \$9,828    e. Other

15. Maria and Matt purchase a new residence on **November 30, 2017**. The seller had already paid the property taxes of \$7,200 for the year. Property taxes for the calendar year are due on November 1.

What amount of the taxes will be deducted on their 2017 federal income tax return?

- a. Zero    b. \$600    c. \$1,200    d. \$6,600    e. Other

**16.** Carla owned and lived in a home for five years before marrying Cecil, who had lived in a nearby rental apartment for the past 15 years. Cecil has lived with Carla since they were married. Six months after their marriage, Carla sold the home. Carla had paid \$300,000 for the home and sold it for \$1,000,000. Carla was the sole owner of the residence until it was sold. She sold it so they could buy a “dream” home. How much gain may Carla and Cecil exclude on a joint return?

- a. \$0                      b. \$62,500                      c. \$250,000                      d. \$500,000                      e. \$700,000

**17.** Dawn (single) purchased a home, and moved into the home in Boone, NC, on January 1, 2009, at a cost of \$400,000. On January 1, 2015 Dawn moved out of the “Boone” home. She used the Boone home only as a vacation home until January 1, 2016. She did not rent the Boone home. On January 1, 2016, she sold the Boone home. Her net selling price was \$630,000.

What amount of the gain is Dawn allowed to exclude from her 2016 gross income?

- a. \$201,250                      b. \$207,000                      c. \$225,000                      d. \$230,000                      e. \$250,000

**18.** Michael (single) purchased for \$400,000 a home on January 1, 2012.

He used it for rental property from January 1, 2012 to January 1, 2014.

He claimed depreciation of \$20,000 for the rental period.

On January 1, 2014, he converted the home to residential property and moved into the home.

On January 1, 2017, he sold the home at a net selling price of \$700,000. What amount of the income (ordinary income and/or capital gain) will Michael include in his 2017 gross income?

- a. \$0                              b. \$25,000                              c. \$40,000                              d. \$140,000                              e. \$250,000

**19.** Margaret (who was single) bought a primary home on December 31, 2010 at a cost of \$800,000.

She borrowed 100% of the cost. She made “interest only” payments on the loan.

The loan balance was \$800,000 and the home value was \$1,400,000 on January 1, 2016.

She does not have a second home.

On January 1, 2016, she borrowed \$110,000 on the home, giving a second mortgage to the bank.

This increased the loan balance to \$910,000.

She used the loan proceeds to buy a sports car and take a vacation. The interest rate on both loans is 10%. How much is mortgage interest may she deduct on her 2016 federal income tax return?

- a. \$0                              b. \$90,000                              c. \$70,000                              d. \$91,000                              e. Other

**20.** Rhonda (who is married, no dependent) purchased a home for \$2,000,000 on January 1, 2017.

She paid \$400,000 cash and borrowed the remaining \$1,600,000. The interest rate is 10%.

She made “interest only” loan payments. This is Rhonda's only residence.

[The balance of the loan continues to be \$1,600,000.] She and her husband file a joint return.

What is her mortgage interest deduction for 2017 on her return?

- a. \$50,000                      b. \$55,000                      c. \$100,000                      d. \$110,000                      e. Other

**21.** In year 1, Kris purchased a new home for \$200,000 by making a down payment of \$150,000 and financing the remaining \$50,000 with a loan, secured by the residence, at 6 percent.

As of January 1, year 4, the outstanding balance on the loan was \$40,000. On January 1, year 4,

when his home was worth \$300,000, Kris refinanced the home by taking out a \$150,000 mortgage at 5 percent. With the loan proceeds, he paid off the \$40,000 balance of the existing mortgage and used the remainder for purposes unrelated to the home. During year 4, he made interest only

payments on the new loan of \$7,500. What amount of the \$7,500 interest expense on the new loan can Kris deduct in year 4 on the new mortgage as home related interest expense?

- a. \$2,000                      b. \$5,000                      c. \$7,000                      d. \$7,500                      e. Other

22. Jerome rented his vacation home for 60 days at a fair rental rate. He lived in the home 30 days. He has provided this information about income and expenses for the vacation home for the year.

Total Income and Expenses	Total						
Sue's gross rental income (60 days)	\$12,000						
Real estate taxes (total)	\$3,650						
Mortgage interest expense (total)	\$7,300						
Utilities & maintenance expense (total)	\$4,800						
Depreciation (total)	\$9,000						

This is not a leap year. How much net rental income will Jerome report on his tax return, using an approved method most favorable for the taxpayer?

- a. \$1,000      b. \$2,200      c. \$3,000      d. \$4,000      e. Other

23. Continue the preceding question. Assume the recession caused fewer families to take vacations in this area. She was only able to rent the home for 10 days (at \$200 per day). Other facts are unchanged. How much gross rental income would she report on her 2016 federal income tax return?

- a. \$0      b. \$2,200      c. \$1,871      d. \$1,000      e. \$200

24. Ron uses 1 room in his home as primary location for his (Schedule C) business. His business earned revenue of \$21,000 and had expenses (other than home office expenses) of \$16,000.

		Totals
Revenue		\$21,000
Expense other than office expenses		(\$16,000)
Net income before home office deduction		\$5,000
Home has 6 rooms, with total of 2,500 square feet.	Sq. Ft.	2,500
Office area is 500 square feet	Sq. Ft.	500
Mortgage interest and real estate taxes for the home.		\$15,000
Insurance, repairs, & maintenance related to home.		\$8,000
Depreciation on entire house for the current year.		\$9,000

How much is his allowable depreciation expense deduction on his income tax return?

- a. \$1,500      b. \$1,250      c. \$440      d. \$400      e. Other

25. Which would you prefer?

- (a) A good grade on this test?  
 (b) A toothache?

1 D

2 D

Buy machine first year or in January 1 of second year.	Buy this year	Buy next year
Machine Cost-Tax deduction	\$10,000	\$10,000
Marginal tax rate (20%, 28%)	20%	28%
Tax savings	\$2,000	\$2,800
Discount factor (10%)	100%	90.9%
P.V. tax savings	\$2,000	\$2,545.20
Before-tax cost	\$10,000	\$10,000
After-tax cost of Machine	\$8,000	\$7,455

0.909090909

3 A

Municipal bond interest	
Annual interest-taxable bond	8%
Income tax rate	35%
1-Income tax rate	65.00%
After tax income	5.20%

4 C

Salary	\$400,000		
Exemptions and itemized deductions	(\$20,000)		
Taxable Income	\$380,000		
Single, 2017	Base	Rate	Tax
First layer for this taxpayer	191,650		46,643.75
Top layer for this taxpayer	188,350	33%	62,155.50
Total	380,000		108,799.25

5 D

Marginal ordinary income tax rate

6 D

Salary		550,000
Deductions		40,000
Taxable income		510,000
Start of top income tax rate	39.6%	418,400

Cost of Jim's stock	\$30	1,000	\$30,000	\$30,000
Value of Jim's stock	\$20	1,000	\$20,000	\$20,000
Jim's loss			\$10,000	\$3,000
Jim's tax savings			39.6%	39.6%
Jim's tax savings			\$3,960	\$1,188
			20.0%	

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Cost of Jim's stock	\$30	1,000	\$30,000
Value of Jim's stock			\$20,000
Ann's basis in stock for loss			\$20,000
Ann's selling price			\$20,000
Ann's gain or deductible loss on sale			\$0
Ann's after tax cash flow			\$20,000

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Cost of Jim's stock	\$10,000
Value of Jim's stock	\$20,000
Ann's basis in stock for gain	\$10,000
Ann's selling price	\$20,000
Ann's gain or deductible loss on sale	\$10,000
Marginal tax rate	25%
Added tax as result of the sale	\$2,500
Selling price	\$20,000
Ann's after tax cash flow	\$17,500

B

- 9 C  
 10 D Joint return may be filed in year of death of a spouse.  
 11 B Basis of property received as gift, when donor paid gift tax.  
 12 D  
 13 D

14 A

<b>Phase-out of exemptions</b>		
<b>Adjusted Gross Income</b>		<b>320,000</b>
<b>Phase-out threshold</b>		<b>313,800</b>
<b>Excess of AGI over threshold</b>		<b>6,200</b>
<b>Amount of layer used in phase-out</b>		<b>2,500</b>
<b>No. of layers (Divide Excess by \$2,500)</b>		<b>2.5</b>
<b>No. of layers rounded up</b>		<b>3</b>
<b>Phase-out using 2% per layer</b>		<b>6%</b>
<b>Exemptions before phase-out</b>	<b>5</b>	<b>\$4,050</b>
<b>Exemptions phased out</b>		<b>(1,215)</b>
<b>Exemptions allowed after phase-out</b>		<b>\$19,035</b>

15 B	Amount of property taxes for the year	\$7,200
	Property tax period	Calendar Yr.
	Date of purchase of home	11/30/2017
	Period of time taxpayers owned home in 2017	1 month
	Fraction of year owned	8.3333%
	Property tax deduction	\$600

16 C Carla

17 D Dawn

<b>Sale of residence</b>		Used as	(Nonqualified)
<b>Date House is Purchased</b>		Residence	
Used as primary residence	1/1/2009		
	1/1/2015	7 years	
Used as vacation home	Start 1/1/2015		
	End 1/1/2016		N/A
<b>Total period of ownership</b>	<b>8 years</b>	<b>7 Years</b>	

Note: a period of nonqualified use does not include time after last use as primary residence

18 D Michael

<b>Sale of residence</b>		Used as	(Nonqualified)
<b>Date House is Purchased</b>		Residence	
Used as Rental property	Start 1/1/2012		
	End 1/1/2014		2 years
Used as primary residence	1/1/2014		
	1/1/2017	3 Years	
<b>Total period of ownership</b>	<b>5 years</b>	<b>3 Years</b>	2 years

	Years	Months	
Total period of ownership	5	60	
Total period of nonqualified use	2	24	
Nonqualified use percentage	<b>40.0%</b>		
Selling price	\$700,000		
Adjusted basis of home when sold	\$380,000		
Total gain realized	\$320,000		
Amount of depreciation claimed when rented	\$20,000		Gain-\$20,000
Remaining amount of gain realized	\$300,000		
Nonqualified use percentage (2 of 5 years)	40.00%		
Reduction of gain subject to the exclusion	\$120,000		Gain-\$120,000
Remaining gain subject to exclusion	\$180,000		
Amount excluded	<b>\$180,000</b>		
Gain included in income	<b>\$140,000</b>		<b>\$140,000</b>

19 B	Cost of home		\$800,000
	Value of home		\$1,400,000
	Balance of first loan (acquisition debt)		\$800,000
	Second loan	\$110,000	
	Second loan amount that is home equity debt		\$100,000
	Total acquisition and home equity debt		\$900,000
	Interest rate		10%
	Interest deduction		\$90,000

20 D	Cost of home	\$2,000,000
	Value of home	\$2,000,000
	Balance of first loan	\$1,600,000
	Amount of residence interest	\$1,100,000
	Interest rate	10%
	Interest deduction	\$110,000

21 C \$140,000 of the \$150,000 is qualifying indebtedness (\$40,000 acquisition indebtedness + \$100,000 home equity indebtedness). So, he may deduct \$7,000 ( $\$7,500 \times 140/150$ ).

22 A Note: This is the approach that is preferred by the taxpayer

Use of Vacation Home:	Data						
Days of Personal Use	30						
Days Rented	60						
Total Days Used	90						
		Schedule E			Schedule A		
		Fraction (Col. 1 / Col. 2)		Rental	Fraction		Personal
Revenue & Expenses:	Total	Rental Days	Total Days	Amounts	Per. Use	Total	Amounts
Revenue	\$12,000			\$12,000			
Interest	7,300	60	365	1,200	305	365	\$6,100
Taxes	3,650	60	365	600	305	365	\$3,050
Total Interest & Taxes	\$10,950			1,800			\$9,150
Net Income after Taxes & Interest				10,200			
Other Exp except Deprec.	\$4,800	60	90	3,200			
NI Before Depreciation				7,000			
Depreciation Expense	\$9,000	60	90	6,000			
Limit on Depreciation				6,000			
Net Income or Loss				\$1,000			

23 A

		Totals		Office Exp.
Revenue		\$21,000	100%	\$21,000
Expense other than office expenses		(\$16,000)	100%	(\$16,000)
Net income before home office deduction		\$5,000	100%	\$5,000
Home has 6 rooms, with total of 2,500 square feet.	Sq. Ft.	2,500		
Office area is 500 square feet	Sq. Ft.	500		
Mortgage interest and real estate taxes for the home.		\$15,000	20%	(\$3,000)
Insurance, repairs, & maintenance related to home.		\$8,000	20%	(\$1,600)
Net income before depreciation				\$400
Depreciation on entire house for the current year.	\$1,800	\$9,000	20%	
Depreciation allocated to home office				\$1,800
Depreciation deduction				\$400

25 A