

# Know Your Income Taxes

## 2009 State Mathematics Conference

Department of the Treasury—Internal Revenue Service  
**Form 1040EZ** **Income Tax Return for Single and Joint Filers With No Dependents** (99) **2008** OMB No. 1545-0074

<p><b>Label</b> (See page 9.) <b>Use the IRS label.</b> Otherwise, please print or type. <b>Presidential Election Campaign</b> (page 9)</p>	<p>Your first name and initial _____ Last name _____          If a joint return, spouse's first name and initial _____ Last name _____          Home address (number and street). If you have a P.O. box, see page 9. _____ Apt. no. _____          City, town or post office, state, and ZIP code. If you have a foreign address, see page 9. _____</p>	<p>Your social security number _____          Spouse's social security number _____          You must enter your SSN(s) above. ▲          Checking a box below will not change your tax or refund.</p>																		
<p>Check here if you, or your spouse if a joint return, want \$3 to go to this fund: <input type="checkbox"/> You <input type="checkbox"/> Spouse</p>																				
<p><b>Income</b> Attach Form(s) W-2 here. Enclose, but do not attach, any payment.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">1</td> <td style="width: 85%;">Wages, salaries, and tips. This should be shown in box 1 of your Form(s) W-2. Attach your Form(s) W-2.</td> <td style="width: 10%; text-align: center;">1</td> </tr> <tr> <td>2</td> <td>Taxable interest. If the total is over \$1,500, you cannot use Form 1040EZ.</td> <td style="text-align: center;">2</td> </tr> <tr> <td>3</td> <td>Unemployment compensation and Alaska Permanent Fund dividends (see page 11).</td> <td style="text-align: center;">3</td> </tr> <tr> <td>4</td> <td>Add lines 1, 2, and 3. This is your <b>adjusted gross income</b>.</td> <td style="text-align: center;">4</td> </tr> <tr> <td>5</td> <td>If someone can claim you (or your spouse if a joint return) as a dependent, check the applicable box(es) below and enter the amount from the worksheet on back. <input type="checkbox"/> You <input type="checkbox"/> Spouse If no one can claim you (or your spouse if a joint return), enter \$8,950 if <b>single</b>; \$17,900 if <b>married filing jointly</b>. See back for explanation.</td> <td style="text-align: center;">5</td> </tr> <tr> <td>6</td> <td>Subtract line 5 from line 4. If line 5 is larger than line 4, enter -0-.</td> <td style="text-align: center;">6</td> </tr> </table>		1	Wages, salaries, and tips. This should be shown in box 1 of your Form(s) W-2. Attach your Form(s) W-2.	1	2	Taxable interest. If the total is over \$1,500, you cannot use Form 1040EZ.	2	3	Unemployment compensation and Alaska Permanent Fund dividends (see page 11).	3	4	Add lines 1, 2, and 3. This is your <b>adjusted gross income</b> .	4	5	If someone can claim you (or your spouse if a joint return) as a dependent, check the applicable box(es) below and enter the amount from the worksheet on back. <input type="checkbox"/> You <input type="checkbox"/> Spouse If no one can claim you (or your spouse if a joint return), enter \$8,950 if <b>single</b> ; \$17,900 if <b>married filing jointly</b> . See back for explanation.	5	6	Subtract line 5 from line 4. If line 5 is larger than line 4, enter -0-.	6
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<p><b>Refund</b> Have it directly deposited! See page 18 and fill in 12b, 12c, and 12d or Form 8888.</p>	<p>12a If line 10 is larger than line 11, subtract line 11 from line 10. This is your <b>refund</b>. If Form 8888 is attached, check here <input type="checkbox"/></p> <p>12a</p> <p><b>b</b> Routing number: [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] <b>c</b> Type: <input type="checkbox"/> Checking <input type="checkbox"/> Savings</p> <p><b>d</b> Account number: [ ]</p>																			
<p><b>Amount you owe</b></p>	<p>13 If line 11 is larger than line 10, subtract line 10 from line 11. This is the amount you owe. For details on how to pay, see page 19. <span style="float: right;">▶ 13</span></p>																			
<p><b>Third party designee</b></p>	<p>Do you want to allow another person to discuss this return with the IRS (see page 20)? <input type="checkbox"/> Yes. Complete the following. <input type="checkbox"/> No</p> <p>Designee's name _____ Phone no. _____ Personal identification number (PIN) _____</p>																			
<p><b>Sign here</b> Joint return? See page 6. Keep a copy for your records.</p>	<p>Under penalties of perjury, I declare that I have examined this return, and to the best of my knowledge and belief, it is true, correct, and accurately lists all amounts and sources of income I received during the tax year. Declaration of preparer (other than the taxpayer) is based on all information of which the preparer has any knowledge.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Your signature _____</td> <td style="width: 10%;">Date _____</td> <td style="width: 30%;">Your occupation _____</td> <td style="width: 30%;">Daytime phone number _____</td> </tr> <tr> <td>Spouse's signature. If a joint return, both must sign. _____</td> <td>Date _____</td> <td>Spouse's occupation _____</td> <td>_____</td> </tr> </table>		Your signature _____	Date _____	Your occupation _____	Daytime phone number _____	Spouse's signature. If a joint return, both must sign. _____	Date _____	Spouse's occupation _____	_____										
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<p><b>Paid preparer's use only</b></p>	<p>Preparer's signature _____ Date _____ Check if self-employed <input type="checkbox"/> Preparer's SSN or PTIN _____          Firm's name (or yours if self-employed), address, and ZIP code _____ EN _____          Phone no. _____</p>																			

For Disclosure, Privacy Act, and Paperwork Reduction Act Notice, see page 37. Cat. No. 11329W Form 1040EZ (2008)

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<http://blscott.home.mindspring.com/NCTMResources.htm>

## *Payroll Taxes for Single Taxpayers*

### *2008 NC Income Tax Schedule*

**Taxable Income is ...**

<b>more than</b>	<b>but not over</b>	<b>The tax is</b>
\$0	\$12,750	6% of the taxable income
12,750	60,000	\$765 + 7% of the amount over \$12,750
60,000	-----	4,072.50 + 7.75% of the amount over 60,000

### *2008 Federal Income Tax Schedule*

**Taxable Income is ...**

<b>more than</b>	<b>but not over</b>	<b>The tax is</b>
\$0	\$8,025	10% of the taxable income
8,025	32,550	\$802.50 + 15% of the amount over \$8,025
32,550	78,850	4,481.25 + 25% of the amount over \$32,550
78,850	164,550	16,056.25 + 28% of the amount over \$78,850
164,550	357,700	40,052.25 + 33 of the amount over \$164,550
357,700	-----	103,791.75 + 35% of the amount over \$357,700

### *Social Security Tax Rates*

<b>Employee</b>	7.65%
<b>Self-Employed</b>	15.3%

The 7.65% tax rate is the combined rate for Social Security and Medicare. The Social Security portion (OASDI\*) is 6.20% on earnings up to the applicable taxable maximum amount (see below). The Medicare portion (HI\*\*) is 1.45% on all earnings.

<b>Maximum Earnings Taxable</b>	<b>2008</b>	<b>2009</b>
<b>Social Security (OASDI only)</b>	\$102,000	\$106,800
<b>Medicare (HI only)</b>	No Limit	No Limit

\* OASDI: Old-Age, Survivors and Disability Insurance

\*\* HI: Hospital Insurance

**Tax Day: April 15, 2009**

**2008 Federal Tax Rate Schedule: Single**

Taxable Income		
is more than	but not over	the tax is
0	8,025	10% of the taxable income.
8,025	32,550	\$802.50 + 15% of the amount over 8,025
32,550	78,850	4,481.25 + 25% of the amount over 32,550
78,850	164,550	16,056.25 + 28% of the amount over 78,850
164,550	357,700	40,052.25 + 33% of the amount over 164,550
357,700		103,791.75 + 35% of the amount over 357,700

The tax rate schedule describes the parameters that generate the tax tables used by individuals to determine the income tax they owe.

NC Department of Revenue <http://www.dor.state.nc.us/>

Internal Revenue Service (US Department of the Treasury) <http://www.irs.gov/>

What to do with students.

- Describe the **2008 Federal Tax Rate Schedule** algebraically (set of linear functions, or system of linear equations, or piecewise function). Identify domain, independent and dependent quantities, the tax function(s). Give different groups of students a different line from the schedule to work with.

$$T(x) = \begin{cases} 0.1x & \text{if } x \leq 8025 \\ 802.50 + 0.15(x - 8025) & \text{if } 8025 < x \leq 32550 \\ 4481.25 + 0.25(x - 32550) & \text{if } 32550 < x \leq 78850 \\ 16056.25 + 0.28(x - 78850) & \text{if } 78850 < x \leq 164550 \\ 40052.25 + 0.33(x - 164550) & \text{if } 164550 < x \leq 357700 \\ 103791.75 + 0.35(x - 357700) & \text{if } x > 357700 \end{cases}$$

- Give each group a different taxable income to work with. Use the **2008 Federal Tax Rate Schedule** to determine their federal income tax liability (how much they owe).
- Fill out a **1040EZ**. Give each group a different gross income to work with. The text is a challenge for adults with college educations. Some whole group read aloud will probably be necessary.
- See **B-74 (updated)** and **B-75** from *Resources for Algebra* attached.
- Have each group determine effective tax rates for **1040EZ** results.
- See **Lesson 3** from *Money Math: Lessons for Life*  
Download at <http://www.publicdebt.treas.gov/mar/marmoneymath.htm>  
Use tax rates from **B-74**.

Gross Income	Social Security (6.2%)	Medicare (1.45%)	Federal*	State**	Total	Percent of Gross
10,000						
20,000						
30,000						
40,000						
50,000						
75,000						
100,000						
250,000						
500,000						
1,000,000						

\* \$8950 standard deduction

\*\* add \$3450 to federal adjusted  
income <60000; 3950 for federal  
adjusted income >60000

<b>Gross Income</b>	<b>Social Security (6.2%)</b>	<b>Medicare (1.45%)</b>	<b>Federal*</b>	<b>State**</b>	<b>Total</b>	<b>Percent of Gross</b>
10,000	620.00	145.00	105.00	270.00	1,140.00	11.40
20,000	1,240.00	290.00	1,256.25	887.50	3,673.75	18.37
30,000	1,860.00	435.00	2,756.25	1,587.50	6,638.75	22.13
40,000	2,480.00	580.00	4,256.25	2,287.50	9,603.75	24.01
50,000	3,100.00	725.00	6,606.25	2,987.50	13,418.75	26.84
75,000	4,650.00	1,087.50	12,856.25	4,847.50	23,441.25	31.26
100,000	6,200.00	1,450.00	19,472.25	6,785.00	33,907.25	33.91
250,000	6,621.60	3,625.00	65,297.25	18,410.00	93,953.85	37.58
500,000	6,621.60	7,250.00	150,464.25	37,785.00	202,120.85	40.42
1,000,000	6,621.60	14,500.00	325,464.25	76,535.00	423,120.85	42.31

\* \$8950 standard deduction

\*\* add \$3450 to federal adjusted  
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