

## 7.13A Sales Tax and Income Tax

### Definitions

**Sales tax** – A percentage of money collected by a store(retailer), in addition to a good or service that was purchased, for the local government as required by the law.

- A sales tax is set by the local government(state, local, county) and the money stays within those systems.

**Earned wages** – The amount an individual earns over a given period.

**Income tax** – A percentage of money paid on the earned wages of an individual or business for the federal and/or state governments as required by law.

1) After viewing the table below you, decide to order two cheeseburgers, three orders of fries, and two drinks. What will be the total of the order including sales tax, if the sales tax is 8.25%?

Hamburger	\$5.29
Cheeseburger	\$6.29
French Fries	\$2.29
Fountain Drink	\$1.99

First we would need to find the cost of two cheeseburgers, three fries, and two drinks.

Step 1:

<u>2 Cheeseburgers</u>	<u>3 Fries</u>	<u>2 Drinks</u>
$\$6.29 \times 2 = \$13.58$	$\$2.29 \times 3 = \$6.87$	$\$1.99 \times 2 = \$3.98$

Now, we will need to find the subtotal of 2 cheeseburgers, 3 fries, and 2 drinks by adding the above amounts together. We will then take that total amount and multiply to the sales tax rate to find the total amount we owe in taxes. Lastly, we will then add our subtotal and sales tax to find the total amount that would be owed.

Step 2:

Step 3:

Step 4:

<u>Subtotal(Cost of goods)</u>		<u>Sales Tax</u>		<u>Total Amount</u>	
2 Cheeseburgers	\$13.58	Cost of goods	\$22.43	Cost of Goods	\$24.43
3 Fries	+ \$ 6.87	Tax Rate(8.65%)	X <u>.0865</u>	Sales Tax	+ <u>\$ 2.02</u>
2 Drinks	+ <u>\$ 3.98</u>		\$ 2.02		\$26.45
	\$24.43				

Therefore, the total amount that we owe for two cheeseburgers, three fries, and two drinks is **\$26.45**.

2) An architect as an earned income of \$162,023. The income tax the architect has to pay is 7.84%. What is the amount of income tax in dollars and cents that the architect must pay?

In this problem in order to find the amount of income tax the architect will have to pay we just need to multiply his earned income by the income tax rate.

<u>Income Tax</u>	
Earned Income	\$162,024
Tax Rate(7.84%)	X <u>.0784</u>
	\$12,702.68

Therefore, he will pay **\$12,702.68** in income tax.

3) Use the Taxable Income Brackets and Rates table from the Internal Revenue Service to answer the question below.

Table 1. 2014 Taxable Income Brackets and Rates			
Rate	Single Filers	Married Joint Filers	Head of Household Filers
10%	\$0 to \$9,075	\$0 to \$18,150	\$0 to \$12,950
15%	\$9,076 to \$36,900	\$18,151 to \$73,800	\$12,951 to \$49,400
25%	\$36,901 to \$89,350	\$73,801 to \$148,850	\$49,401 to \$127,550
28%	\$89,351 to \$186,350	\$148,851 to \$226,850	\$127,551 to \$206,600
33%	\$186,351 to \$405,100	\$226,851 to \$405,100	\$206,601 to \$405,100
35%	\$405,101 to \$406,750	\$405,101 to \$457,600	\$405,101 to \$432,200
39.6%	\$406,751+	\$457,601+	\$432,201+

Bonnie and Hank are married and need to file their federal income taxes. Bonnie earned \$55,893.93 and Hank earned \$46,213.67 in 2014. How much money will Bonnie and Hank owe in federal income tax if they are filing jointly and have no deductions?

First, we will need to determine how much Bonnie and Hank’s total earned income is as they are filing jointly by adding Bonnie’s income and Hank’s income together.

Step 1:

<u>Total earned income</u>	
Bonnie’s income	\$55,893.93
Hank’s income	+ <u>\$46,213.67</u>
	\$102,107.60

Since Bonnie and Hank are married and they are filing a joint return we will look at the Married Joint Filers column. Each part of their income is taxed at a different rate up to the \$102,107.60. For example, the amount they make between \$0 and \$18,150 is taxed at a rate of 10% according to the 2014 Taxable Income Brackets and Rates table. The amount they make between \$18,151 and \$73,800 is taxed at a rate of 15%. The amount they make between \$73,801 and \$102,107.60 is taxed at a rate of 25%. Therefore, as to not overcharge them in taxes we will find the amount of taxes they pay for each portion of their income. Lastly, we will then add up all the portions to find their total amount of income tax.

<u>Income</u>	<u>Tax Rate</u>	<u>Rounded tax</u>
18,150 – 0 = 18,150 →	18,150 X 10% =	1,815
73,800 – 18,151 = 55,649 →	55,649 X 15% =	8,347
102,108 – 73,801 = 28,307 →	28,307 X 25% =	+ <u>7,077</u>
		17,239

Therefore, Bonnie and Hank will owe **\$17,239** in income tax.