

In the United States the money that an individual makes is taxed by the federal government. The table below represents the amount of federal taxes owed by either a single person or a married person in the year 2015.

**TABLE 7—ANNUAL Payroll Period**

<b>(a) SINGLE person (including head of household)—</b>				<b>(b) MARRIED person—</b>			
If the amount of wages (after subtracting withholding allowances) is:		The amount of income tax to withhold is:		If the amount of wages (after subtracting withholding allowances) is:		The amount of income tax to withhold is:	
Not over \$2,250 . . . . .		\$0		Not over \$8,550 . . . . .		\$0	
Over—	But not over—	of excess over—		Over—	But not over—	of excess over—	
\$2,250	—\$11,525 . .	—\$2,250	\$0.00 plus 10%	\$8,550	—\$27,100 . .	—\$8,550	\$0.00 plus 10%
\$11,525	—\$39,900 . .	—\$11,525	\$927.50 plus 15%	\$27,100	—\$83,850 . .	—\$27,100	\$1,855.00 plus 15%
\$39,900	—\$93,400 . .	—\$39,900	\$5,183.75 plus 25%	\$83,850	—\$160,450 . .	—\$83,850	\$10,367.50 plus 25%
\$93,400	—\$192,400 . .	—\$93,400	\$18,558.75 plus 28%	\$160,450	—\$240,000 . .	—\$160,450	\$29,517.50 plus 28%
\$192,400	—\$415,600 . .	—\$192,400	\$46,278.75 plus 33%	\$240,000	—\$421,900 . .	—\$240,000	\$51,791.50 plus 33%
\$415,600	—\$417,300 . .	—\$415,600	\$119,934.75 plus 35%	\$421,900	—\$475,500 . .	—\$421,900	\$111,818.50 plus 35%
\$417,300 . . . . .		—\$417,300	\$120,529.75 plus 39.6%	\$475,500 . . . . .		—\$475,500	\$130,578.50 plus 39.6%

Use the table to answer the following questions. You may use a calculator for this page.

1.	How much can a single person make in a year before having to pay federal taxes?	
2.	How much can a married person make in a year before having to pay federal taxes?	
3.	What dollar amount of taxes are owed by a single person who made \$39,900 last year?	
4.	What dollar amount of taxes are owed by a married person who made \$240,000 last year?	
5.	What is the highest percentage a single or married person would have to pay in federal taxes?	
6.	What dollar amount of taxes are owed by a single person who made \$100,000 last year?	
7.	What dollar amount of taxes are owed by a married person who made \$50,000 last year?	
8.	What dollar amount of taxes are owed by a single person who made \$1,000,000 last year?	

The Swift family is examining their personal finances to determine if they can afford to purchase a home. The Swift family has a current monthly net income of \$3185. The Swift family’s monthly expenses are shown below.

Rent \$900	Entertainment \$200	Car insurance \$120
Clothes \$120	Emergency savings \$100	Electricity \$122
Car payment \$240	Restaurants \$175	Retirement savings \$150
Gasoline and car maintenance \$170	Cell phones \$89	Water and gas \$52
Groceries \$275	Miscellaneous \$72	

Complete the personal budget for the Swift family in the table below and find the percentage of monthly income going to each category. **You may use a calculator for the percentage column.** Round percentages to the nearest whole percent.

<b>Swift Family Monthly Budget</b>		
Monthly Net Income		
Expenses	Cost	Percentage of Monthly Net Income
Housing		
Food		
Utilities (Electric, Water, Gas)		
Savings		
Transportation		
Other		
Total Expenses		

1.	Does the Swift family spend more than they make? Explain.	
2.	What percent of the family’s net income is housing currently?	
3.	What percent of the family’s net income is transportation?	
4.	Assuming all other costs remain the same, will the Swift family be able to afford a monthly house payment of \$1000? \$1200? \$1400?	
5.	Calculate the exact amount the family can afford to spend on housing and still break even each month.	
6.	Based on the number calculated in the question above, what percent of the net income would be spent on housing?	
7.	Fixed expenses are those that remain the same each month. Give two examples of expenses that fixed.	
8.	Variable expenses are those expenses that vary from month to month. Give two examples of expenses that vary from month to month.	

The Bieber family is trying to determine their net worth. Net worth is equal to your assets (things you own) minus your liability (things you owe). **Monthly expenses such as utility bills or paying for piano practice are neither an asset nor a liability.**

Use the data below to determine the net worth of the Bieber family. The family has one working parent, a stay-at-home parent and three children. Two of the children are in elementary school and the youngest child is in pre-Kindergarten. They have a house, a car, a mini-van, and carry some credit card debt.

The house is valued at \$123,000 with a mortgage balance of \$80,000.
The car is worth \$15,000 and the mini-van is worth \$20,000. They owe a total of \$31,000 on the vehicles.
The family owes a \$4500 loan they took out to buy new household furnishings.
They have \$15,000 in their retirement account.
They have \$1,500 in emergency savings, \$1,000 in savings, \$500 in checking, and \$1500 in a CD (a type of saving account).
They have \$300 in cash.
Their balances on credit cards total \$15,000.
The family pay \$500 per month for school loans; the current balance is \$25,000.
The family pays \$350 a month for pre-K tuition and \$100 a month for each child as they are all on soccer teams.

<b>Net Worth Worksheet for the Bieber Family</b>			
<b>Assets</b>		<b>Liabilities</b>	
All bank accounts		Home mortgage	
Retirement accounts		Auto loan(s)	
Cash		Credit card(s)	
Value of home		Student loan(s)	
Value of auto(s)		Other loan(s)	
Value of furniture/household items		<b>TOTAL LIABILITIES</b>	
Value of jewelry/art/etc.			
<b>TOTAL ASSETS</b>			
<b>NET WORTH =</b>			

1.	Which items did not count as an asset or a liability?	
2.	Does this family have a positive or negative net worth?	
3.	Determine three suggestions for this family to increase their net worth.	

Many families in the United States are saving at this very moment to buy a home. Paying 20% of the cost of the home as a down payment is a smart financial decision. However, it often takes a long period of time to save up enough money to make that down payment.

Look at the families listed below. Each is earning interest on their savings. Compute the amount of interest based on the given type of interest and time period. **You may use a calculator for calculations on this page.**

<b>Simple Interest</b>	$I = prt$	<b>Compound Interest</b>	$A = P(1 + r)^t$
Remember $I$ is the amount of interest		Remember $A$ is the total amount (principal + interest)	

		<b>Interest Earnings</b>	<b>Total \$</b>
		<i>nearest dollar</i>	<i>nearest dollar</i>
1.	Adams family: \$16000 at 5% simple interest for 5 years		
2.	Bruns family: \$14000 at 3% simple interest for 12 years		
3.	Cobb family: \$15000 at 4% simple interest for 10 years		
4.	Daly family: \$17000 at 7% simple interest for 4 years		
5.	Edmond family: \$11000 at 5% compound interest for 13 years		
6.	Farmer family: \$13000 at 3% compound interest for 10 years		
7.	Grizwold family: \$12000 at 6% compound interest for 8 years		
8.	Hayes family: \$10000 at 10% compound interest for 8 years		

9.	Each family above wishes to purchase a \$200,000 home. If they all have \$20,000 savings plus the total amount from above, which families will be able to afford a 20% down payment on their new homes?	
10.	Mary and Macey each invest \$100 at an interest rate of 5% for 8 years. Mary's is simple interest and Macey's is compound interest. Which person will have the most money at the end of 8 years? Why?	
11.	$A = 800(1 + 0.03)^{2.5}$	
	In the compound interest formula above, what does 800 represent?	
12.	In the problem above, what does 0.03 represent?	
13.	In the problem above, what does 2.5 represent?	