

Unit 13: Federal Income Tax - Homework

Go to www.moneychimp.com, click on the "Tax Rates for 2010 and Beyond." Set the tax year to "2010" and the filing status to "Married filing separately," and use that table to calculate your answers to Problems 1-8. Note that you can plug the taxable income into the calculator in the middle of the page and check your answers, but if you do not show all of your work, you will not receive credit.

1. Calculate the dollar amount of taxes paid, the effective tax rate paid, and the marginal tax rate paid for a taxable income of \$5,259.00:

$$5,259 - 0 = 5,259 \times .10 = \underline{525.90}$$

$$\frac{525.90}{5,259.00} \times 100 = 10\%$$

Dollar Amount of Taxes (1/2): 525.90
 Effective Tax Rate (1/2): 10%
 Marginal Tax Rate: 10%

2. Calculate the dollar amount of taxes paid, the effective tax rate paid, and the marginal tax rate paid for a taxable income of \$8,184:

$$5,259 - 0 = 5,259.00 \times .10 = 525.90$$

$$8,184 - 5,259 = 2,925 \times .10 = \underline{292.50}$$

$$\underline{818.40}$$

$$\frac{818.40}{8,184.00} \times 100 = 10\%$$

Dollar Amount of Taxes (1/2): 818.40
 Effective Tax Rate (1/2): 10%
 Marginal Tax Rate: 10%

3. Calculate the dollar amount of taxes paid, the effective tax rate paid, and the marginal tax rate paid for a taxable income of \$17,643:

$$8,375 - 0 = 8,375 \times .10 = 837.50$$

$$17,643 - 8,375 = 9,268 \times .15 = \underline{1390.20}$$

$$\underline{2227.70}$$

$$\frac{2,227.70}{17,643} \times 100 = 12.63\%$$

Dollar Amount of Taxes (1/2): 2,227.70
 Effective Tax Rate (1/2): 12.63%
 Marginal Tax Rate: 15%

4. Calculate the dollar amount of taxes paid, the effective tax rate paid, and the marginal tax rate paid for a taxable income of \$31,894:

$$8,375 \times .10 = 837.50 = \underline{837.50}$$

$$31,894 - 8,375 = 23,519 \times .15 = \underline{3527.85}$$

$$\underline{4365.35}$$

$$\frac{4,365.35}{31,894.00} \times 100 = 13.69\%$$

Dollar Amount of Taxes (1/2): 4365.35
 Effective Tax Rate (1/2): 13.69%
 Marginal Tax Rate: 15%

5. Calculate the dollar amount of taxes paid, the effective tax rate paid, and the marginal tax rate paid for a taxable income of \$101,326:

$$\begin{aligned}
 &8,375.00 \times .10 = 837.50 \\
 &34,000.00 - 8,375.00 = 25,625 \times .15 = 3,843.75 \\
 &68,650 - 34,000 = 34,650 \times .25 = 8,662.50 \\
 &101,326 - 68,650 = 32,676 \times .28 = 9,149.28
 \end{aligned}$$

Dollar Amount of Taxes (1/2): $22,493.03$
 Effective Tax Rate (1/2): 22.20%
 Marginal Tax Rate: 28%

6. Calculate the dollar amount of taxes paid and the take home pay for a taxable income of 8,375:

$$\begin{aligned}
 &8375 \times .10 = 837.50 \\
 &\frac{837.50}{8,375.00} \times 100 = 10\%
 \end{aligned}$$

Dollar Amount of Taxes (1/2): 837.50
 Effective Tax Rate (1/2): 10%
 Take Home Pay (1/2): $7,537.50$

7. Calculate the dollar amount of taxes paid and the take home pay for a taxable income of 8,376:

$$\begin{aligned}
 &8375 \times .10 = 837.50 \\
 &1 \times .15 = .15 \\
 &\frac{837.65}{8376.00} \times 100 = 10.0006
 \end{aligned}$$

Dollar Amount of Taxes (1/2): 837.65
 Effective Tax Rate Paid (1/2): 10.0006
 Take Home Pay (1/2): $7,538.35$

8. Calculate the hypothetical dollar amount of taxes paid, the hypothetical effective tax rate paid and the hypothetical take home pay for a taxable income of 8,376 if all of that income was hypothetically subject to the marginal tax rate:

$$\begin{aligned}
 &8,376.00 \times .15 = 1256.40 \\
 &\frac{1256.40}{8,376.00} \times 100 = 15\%
 \end{aligned}$$

Hypothetical Dollar Amount of Taxes (1/2): 1256.40
 Hypothetical Effective Tax Rate Paid (1/2): 15%
 Hypothetical Take Home Pay (1/2): $7,119.60$