

Bracket Budget Lab

Calculate income tax, withholding, refunds, and amounts due.

HIGH SCHOOL • MA.912.FL.2.6

MA.912.FL.2.6 "Given a real-world scenario, complete and calculate federal income tax using spreadsheets and other technology."

NAME _____

DATE _____

TAX BY BRACKET

For this worksheet, ignore credits and other taxes, and use this 2024 practice table for a single filer: first \$11,600 at 10%; next \$35,550, up to \$47,150, at 12%; amount above \$47,150, up to \$100,525, at 22%. Taxable income is income after the deduction, and you pay each rate only on the part in that bracket. In a spreadsheet, enter each bracket portion in a separate row, multiply by its rate, and add the taxes.

WORKED EXAMPLE

Calculate the federal income tax on taxable income of \$18,000.

1. First bracket: $\$11,600 \times 10\% = \$1,160$.
2. Remaining income: $\$18,000 - \$11,600 = \$6,400$.
3. Second bracket: $\$6,400 \times 12\% = \768 .
4. Total tax: $\$1,160 + \$768 = \$1,928$.

Answer: Federal income tax: \$1,928.

PRACTICE 6 problems

- 1** Calculate the federal income tax on taxable income of \$8,000.

ANSWER _____

- 2** Calculate the federal income tax on taxable income of \$15,000.

ANSWER _____

- 3** Calculate the federal income tax on taxable income of \$23,600.

ANSWER _____

- 4** Calculate the federal income tax on taxable income of \$47,150.

ANSWER _____

- 5** Calculate the federal income tax on taxable income of \$50,150.

ANSWER _____

- 6** A single filer has gross income of \$25,600 and uses the \$14,600 standard deduction. Find the taxable income and federal income tax.

ANSWER _____

APPLY IT Show your work

- 1** Maya earns \$31,100 from her part-time job during the year. Her employer withheld \$2,000 for federal income tax, and she uses the \$14,600 standard deduction. Use bracket rows in a spreadsheet or on paper to find her taxable income, federal income tax, and refund or amount due.

WORK SPACE

ANSWER _____

- 2** Andre works during the school year and summer, earning total wages of \$40,600. His W-2 forms show \$2,100 withheld for federal income tax, and he uses the \$14,600 standard deduction. Find his taxable income, federal income tax, and refund or amount due.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Lena has annual income of \$63,000. She may use either a \$14,600 standard deduction or \$15,000 in eligible itemized deductions, but not both. Her employer withheld \$5,500 for federal income tax. Choose the deduction that gives Lena the lower tax, then find her taxable income, federal income tax, and refund or amount due.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Calculate the federal income tax on taxable income of \$8,000.	\$800
2	Calculate the federal income tax on taxable income of \$15,000.	\$1,568
3	Calculate the federal income tax on taxable income of \$23,600.	\$2,600
4	Calculate the federal income tax on taxable income of \$47,150.	\$5,426
5	Calculate the federal income tax on taxable income of \$50,150.	\$6,086
6	A single filer has gross income of \$25,600 and uses the \$14,600 standard deduction. Find the taxable income and federal income tax.	Taxable income: \$11,000; federal income tax: \$1,100

PART 2 • APPLY IT

- Taxable income: \$16,500; federal income tax: \$1,748; refund: \$252** Subtract the standard deduction from income to get \$16,500 taxable income. Compare the \$1,748 tax with \$2,000 withheld to find a \$252 refund.
- Taxable income: \$26,000; federal income tax: \$2,888; amount due: \$788** Subtract the standard deduction from wages to get \$26,000 taxable income. His tax is \$2,888, so subtracting \$2,100 withheld leaves \$788 due.

CHALLENGE

Use the \$15,000 itemized deduction. Taxable income: \$48,000; federal income tax: \$5,613; amount due: \$113

Accept equivalent money notation, such as \$800.00. For the challenge, accept only the \$15,000 itemized deduction because it produces the lower taxable income and lower tax.