"A penny saved is worth two pennies earned. . . after taxes."

–Randy Thurman

Problem 1. (10pt) Consider the 2022–2023 federal income tax brackets shown below. In the chart on the left below, only the brackets and tax levels are found. In the chart on the right below, the tax rate, bracket, and amount of taxes owed are shown.

Tax Rate	Taxable Income
10%	$0 – $10,275
12%	$10276 – $41,775
22%	$41,776 – $89,075
24%	$89,076 – $170,050
32%	$170,051 – $215,950
35%	$215,951 – $539,900
37%	$539,901 or more

Tax Rate	Taxable Income	Tax Owed
10%	$0 – $10,275	10% of taxable income.
12%	$10276 – $41,775	$1,027.50 plus 12% of amount over $10,275.
22%	$41,776 – $89,075	$4,807.50 plus 22% of amount over $41,775.
24%	$89,076 – $170,050	$15,213.50 plus 24% of amount over $89,075.
32%	$170,051 – $215,950	$34,647.50 plus 32% of amount over $170,050.
35%	$215,951 – $539,900	$49,335.50 plus 35% of amount over $215,950.
37%	$539,901 or more	$162,718 plus 37% of amount over $539,900.

Explain how the amount of tax owed in the chart on the right is computed by showing there the $1,027.50 and the $4,807.40 are arrived at.

Problem 2. (10pt) Suppose that you place $8,520 into a bank account that earns 1.2% annual interest, compounded monthly. If you save this money in this bank account for 4 years, how much money do you have at the end of the 4 years? How much interest have you earned?