

Calculating Income Tax

Income tax is money paid to the government based on earnings. The amount of tax you pay depends on the tax system being used.

Part A: Uniform Tax (Flat Tax)

A uniform or "flat" tax is when a single tax rate is applied to all income.

1. Calculate the tax payable on an income of \$50,000 if the tax rate is a flat 18%.

2. If the uniform tax rate is 22%, how much tax is paid on an income of \$75,000? What is the after-tax income?

Part B: Progressive Tax Brackets

Most countries, including New Zealand, use a progressive system where income is split into brackets, and higher brackets are taxed at a higher rate. The table below shows the income tax rates.

For each dollar of income	Tax rate
0 - \$15,600	10.5%
15, 601–53,500	17.5%
53, 501–78,100	30%
78, 101–180,000	33%
\$180,001 and over	39%

Worked Example: Calculate the tax on an income of \$65,000.

We split the income into the parts that fall into each bracket:

Step 1 (First Bracket): The first \$15,600 is taxed at 10.5%.

$$15,600 \times 0.105 = \$1,638.00$$

Step 2 (Second Bracket): The portion of income between \$15,601 and \$53,500. This amount is $\$53,500 - \$15,600 = \$37,900$. This is taxed at 17.5%.

$$\$37,900 \times 0.175 = \$6,632.50$$

Step 3 (Third Bracket): The final portion of income, from \$53,501 up to \$65,000. This amount is $\$65,000 - \$53,500 = \$11,500$. This is taxed at 30%.

$$\$11,500 \times 0.30 = \$3,450.00$$

Step 4 (Total Tax): Add the tax from all brackets together.

$$\$1,638.00 + \$6,632.50 + \$3,450.00 = \$11,720.50$$

Now, use the progressive tax table to calculate the total tax payable for the following incomes.

3. An annual income of \$48,000.

4. An annual income of \$75,000.

5. An annual income of \$100,000.