

GRADE 10 ESSENTIALS PERSONAL FINANCE (UNIT B)

UNIT NOTES

1. Outline

Solve consumer problems, including:

- Wages earned in various situations
- Gross Income
- Deductions
- Net Income

2. Gross Income - Types of Income

- a. **Gross income:** The total income before deductions. ‘Gross’ means big in French.
- b. **Wages:** Based on hours worked, a *rate* of pay in dollars per hour. Paid out either daily, weekly, bi-weekly basis. May include Overtime and/or shift premiums. The province sets the minimum hourly wage that must be paid.
- c. **Salary:** based on a yearly amount of income and paid out bi-weekly, semi-monthly, etc. Usually professionals. Usually no overtime paid!
- d. **Piecework.** Given for each piece of work. Every light bulb you change in a store earns you \$2.35 for example. Sewing clothes in a factory: every pair of jeans you sew is \$0.85.
[Have you ever heard of ‘FAIR TRADE??’] What is it??
- e. **Fee – for – service:** given for a service provided. Landscaping, shoveling snow, dry-cleaning.

- f. **Commission:** based on a percentage of the value of articles sold.
Straight Commission: a flat percentage on *all* sales

Salary or wage plus Commission: eg: like Sports Check; \$9 per hour plus 2.5% of sales

Graduated Commission. A certain percentage on a certain first amount sold, then higher after that amount to encourage you to sell

Salary/wage plus commission with quota. A fixed salary or wage plus a commission provided you sell a certain amount of goods or services. Eg: telemarketing.

- g. **Contract:** after a specific project done. Eg: writing software, teaching at Adult Learning Centres.
- h. **Tips and Gratuities:** service industry workers. eg: waiting staff; usually 15%.

(1) what is 15% *of* a \$54 dinner?

(2) what is 15% *of* a \$122 food order?

- i. **Self Employed.** Working as your own boss, your own hours.

j. **Other income.** Child support, CCB, social benefits, interest/trust accounts, etc.

3. Income Example Calculations:

a. **Wage+Tips.** Jane has a choice of two restaurants at which to work. Marios pays \$12/hr and tips average \$24 / day. Teppans pays \$11.25/hr and tips average \$35 daily. She is in University so only plans to work 30 hours weekly over four days of the week, how much should she earn at each restaurant? (\$456, \$477.50)

b. **Graduated Commission.** A salesperson receives an 8% commission on the *first* \$1,000 of sales, and **14%** on all sales in remaining excess of \$1,000. If his sales for the past week were \$5,000 find his Gross Earnings (Ans: \$640)

c. **Piecework.** Tim assembles packets of cutlery for the airline industry. He earns **6.5 cents** for each *acceptable* packet assembled. If he assembles 3870 packets per week but 14 do not pass inspection, calculate his gross income for the week. (Ans: \$250.64)

d. **Overtime Example.** Susan McLaren worked **50** hours in one week. She makes a wage of **\$14.50** per hour (regular pay). **Overtime** is paid after **40 hours** in a calendar week and the overtime rate is calculated at **1.5** times the regular rate of pay (*'time and a half'*). Calculate her **gross earnings** for the week. (Ans: \$797.50)

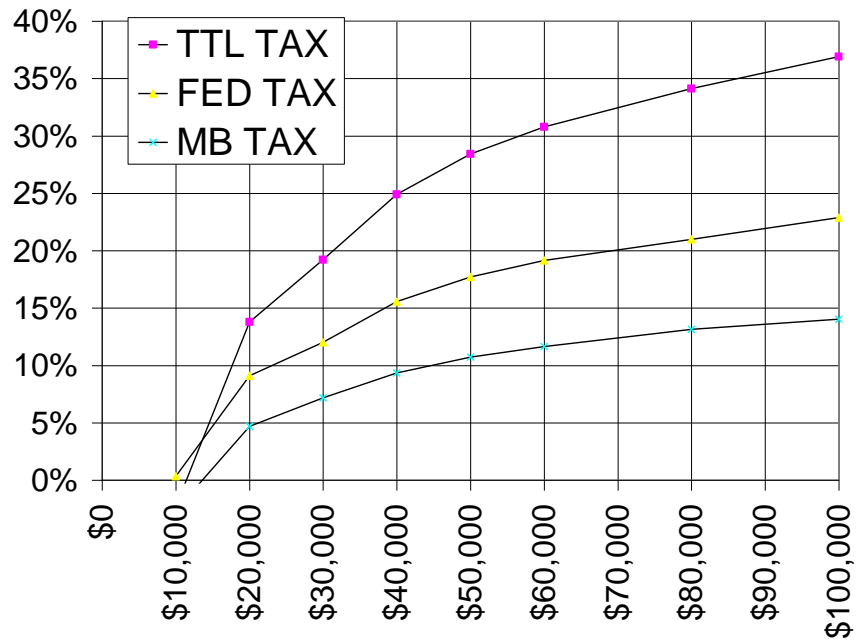
Deductions from Gross Pay to get Net Income

4. Federal and Provincial Income Tax Deductions.

a. Canadians pay '*progressive tax rates*' on their income. Canadian taxes are 'progressive' since the more income you have the more *more* tax you pay. The *rate* of taxation is higher the more taxable income you have.

Some current tax rates are at the Appendix to these notes:

b. In a 'progressive' tax you keep less and less of **each new dollar** you earn.



c. The **graph** above demonstrates remarkably well the overall average tax rate you pay depending on the amount of taxable income.

d. **Complete the Table.** Using the graph we can get an idea of how much income tax Canadians pay. Let's complete the table for a few particular '*notional*' examples.

Taxable Income	\$20K	\$40K	\$60K	\$80K	\$100K
Provincial Income Tax % / \$					
Federal Income Tax % / \$					
Total Tax % / \$					
After Tax Income					

****Note this course is certainly not a complete course on tax accountancy, taxes are far more difficult than indicate here, however this is a remarkably good approximation that demonstrates the tax system*****

e. **Taxable Income.** Not all income is taxed. Certain special investments may have some '*tax relief*'. In particular though, the following *contributions* are not taxed: Registered Retirement Savings Plans (**RRSPs**), a Company Pension Plan (eg: a civil service pension plan); and Union Dues. The government wants you to save some money so when you retire you will not be overly reliant on the meager government assistance (the contributory CPP, and the Old Age Supplement;OAS) so retirement savings in general are not subject to income tax.

f. **Income Tax Claim Codes.** Since not all income is taxed, there exists '*claim codes*' that are particular to several personal circumstances. Income tax is *deducted* (or '*withheld*') and sent to the government by your employer every '*pay period*'. The claim codes are used to better refine the income tax payable; how much is withheld on each pay. As an example: a single mom with an elderly parent at home might be a claim code 4 and have a small amount of tax withheld. Conversely, someone who is single and working a second job will likely have a claim code of 1 and have considerably more of their income withheld each pay period on their second job.

It is all very confusing, but you will have lots of practice problems.

More Deductions from Pay

5. **CPP. Canada Pension Plan.** Designed in the 60s when life span was shorter. When there were seven working people for every retired person; now there is four working people for every retired person and the retired persons are living longer.

CPP *benefits* (\$ you receive) are designed to pay rather *limited* security benefits when you are **over 65**. You are supposed to save *other money* yourself. **CPP** never existed till 1963! Families were responsible for their elders.

The ‘**premium**’ or amount that you pay or *contribute* into the CPP system was formerly **2%** of gross income prior to **1996**, currently it is **~5.15%** from your (gross) pay check (and still rising ↑). Our society is getting older on average and so, the benefits paid out may have to soon be reduced or the younger population may have to work till an older age and pay higher premiums.

6. **EI Employment Insurance Premiums:** Presently **~1.87%** (?) of gross pay (down from **1.98%** before that, but it changes annually with federal budget.).

7. **Union Dues** – Contributions to a union to represent you at your job are taken from non-taxable income. The unions had arranged many years ago that the money you give them is not subject to income tax by the government; however this amounts to all of perhaps a savings of at most **~\$25** a month in savings when you do the calculation for an average wage earner.

8. **Registered Retirement Savings Plan Contributions (RRSP) – Non-Taxable Contributions.** The government wants to encourage you to save **extra** money for retirement so **they do not tax** money you put aside for when you are older (until you cash it in of course).

9. **Company Pension Plan Premiums– Non-Taxable Contributions** to encourage you to get a secure job that has a company pension plan for when you retire. Often big companies and government jobs will **match** your contribution to your retirement fund if you have a company that can afford to do that anymore!

10. **Other Deductions:**

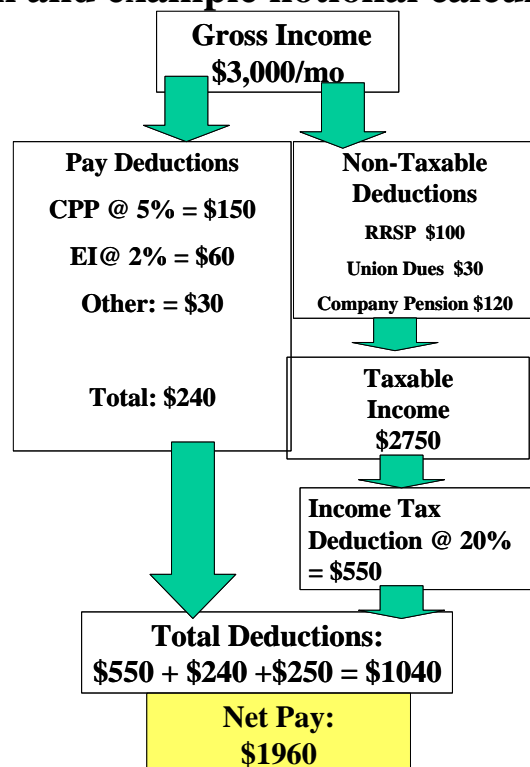
eg: Coffee Fund, Parking, United Way, Christmas Cheer Fund, Charities,

Let's Calculate our Take Home Pay

11. Calculating your 'Net' Pay ('Take Home' Pay). Some easy formulas! ↓

- a. **Taxable Income = Gross Pay – (Company Pension Contributions + RRSP Contributions + Union Dues)**
- b. **Income Tax = Taxable Income times Tax rate** or else use a 'table lookup' for the given taxable income (both Federal and Provincial) and claim code.
- c. **EI Contribution = Gross Pay * EI contribution rate**
- d. **CPP Contribution = Gross Pay * CPP Contribution Rate =**
- e. **Net Pay = Taxable Income – Income Tax – EI Contribution – CPP Contribution – Other Deductions**

Diagram explanation and example notional calculation of Net Income:



Notice how you pretty much 'lose' a third of your pay! Mind you, you will see the pension money back when you get older, so it is not completely gone.

Interesting to note that if you put aside \$100 / month of savings for 40 years you could likely have about \$200,000 or more saved up. We learn how to calculate that in another unit.

12. **Example Calculation 2.** Monica makes **\$600** per week **gross**. She puts **\$25** per week into an **RRSP**. (*BTW*: After 20 years this \$25/week will grow to likely ~\$45,000!). Her **union** charges her **\$8** per week for their service. For her income she pays **Tax** at a rate of **20%** of **Taxable Income** (**Federal and Provincial** combined). She pays **CPP** Premiums at **4.95%** of gross and **EI** premiums at **1.87%** of Gross. The employer takes off parking at work which costs her **\$22.50** per week and also her coffee fund at work that costs **\$3.00** per week. She also donates to the Mission House **\$5.00** per week through her employer. What is her weekly *take home* (ie: **Net**) pay?

GROSS =	\$600 weekly	
Non-Taxable Deductions:		
–RRSP	–\$25.00	
–Union Dues	–\$8.00	
–Company Pension	–\$0.00	
TAXABLE INCOME =	\$567.00	
Income Taxes:		
Taxes Provincial 8%	–\$113.40	Tax rate X Taxable Income
Taxes Federal 12%		
Taxable deductions		
CPP Contribution	–\$29.70	4.95% of Gross Income
EI Contribution	–\$11.22	1.87% of Gross Income
Parking	–\$22.50	
Coffee	–\$3.00	
Charity	–\$5.00	
Total Income Tax and Taxable deductions	–\$184.82	
NET PAY:	\$382.18	Weekly

13. **Reminder:** This is certainly not a course in tax accountancy and it is all *far* more complicated than this, but these calculations are fairly representative of the real way a pay check works!

Notice a simple mathematical formula would be a lot easier than these unwieldy tax tables but there do exist some folks who do not know how to use a formula!

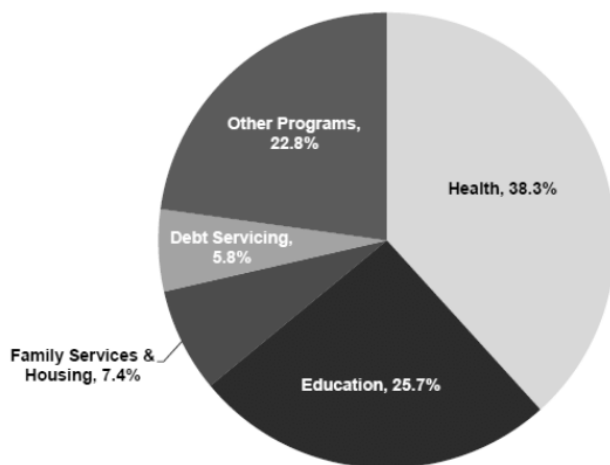
CC stands for Claim Code. Most working stiffs are a CC4.

What do the Federal and Provincial Governments spend our money on?

Provincial Budget

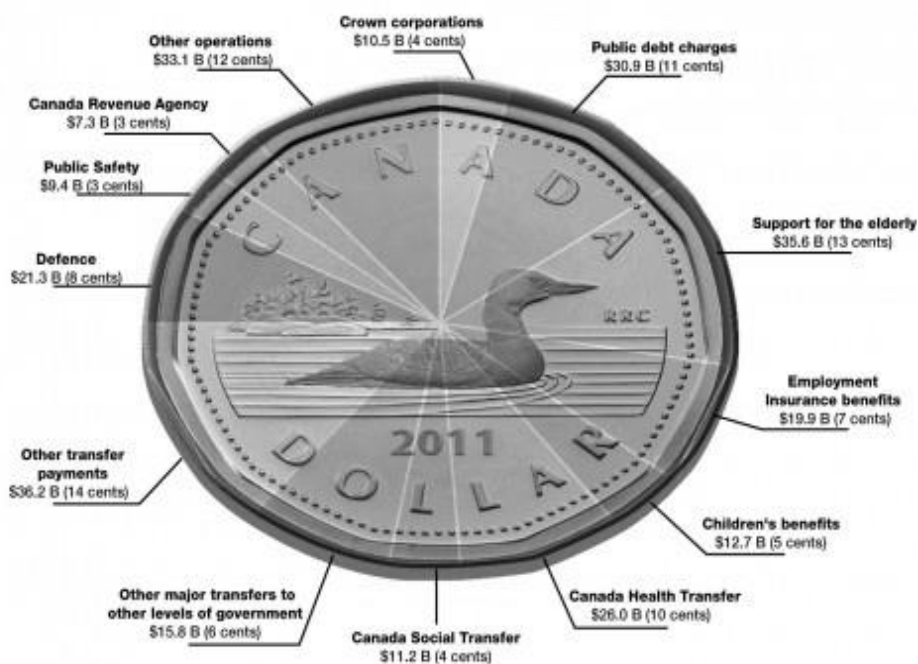
Here is a graphic on where our Provincial Budget is **spent**.

Of course where the money comes from is a different issue. We actually get more money from the other provinces than we get from Income Tax of our own Manitobans. They are so nice to us.



Manitoba Budget Expenditures 2014-15

Where Your Tax Dollar Goes—2010/11



Source: Public Accounts of Canada 2011
 For more information, see <http://www.fin.gc.ca/taxdollar/index-eng.asp>

Federal Expenditures

An older image from 2010-11 but still representative.

Note \$6.5 Billion for Aboriginal Affairs is in the 'Other Transfer Payments' slice.