

Friday - Earning Income Test

Thursday - Review

Wednesday - Review

Tuesday - deductions practice

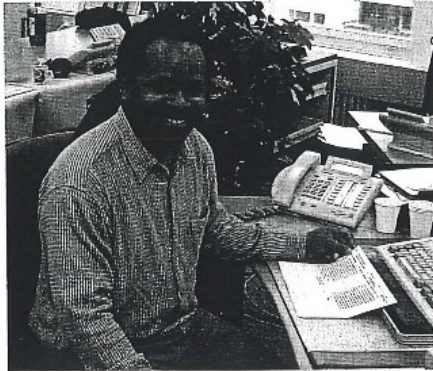
Monday - deduction tables
(don't be scared)

Oct 4- looked through text book together.

- tables at canada.ca or % used to calculate deductions
- taxable income, tax credits, benefits - all related to deductions
- No homework!

Deductions and Net Pay

2.4



Eric has to calculate a number of deductions from the miners' wages, including union dues.

MATH ON THE JOB

Eric works as an administrative assistant at a mining company. He has a certificate in business administration from a college. At work, Eric does a variety of financial transactions, including the payroll for the company employees. Eric has to calculate the gross wages of each person and then subtract deductions for government programs, such as income tax, the Canada Pension Plan, and Employment Insurance, and for company programs, such as a dental plan. Eric relies on the Canada Revenue Agency instructions for calculating these amounts.

Eric also has to deduct union dues from the employees' paycheques. If an employee earns \$32.50/h, works 40 h/week, pays 2.4% in union dues, and is paid weekly, how much are the weekly union dues? What is the hourly rate?

EXPLORE THE MATH

As you learned earlier, the total amount of money a person earns at his or her job is called gross pay. Working people are not usually paid their gross pay, however. Instead, they take home their **net pay**. Net pay refers to the amount left after certain deductions have been made by an employer.

net pay: also known as take-home pay; refers to the money paid to an employee after deductions have been made

Look at the pay statement shown here. What categories of deductions are made from gross pay?

pay stub

Employee Name: Hermione		
Company:	Pay Begin Date: 09/08/2010	Net Pay:
	Pay End Date: 15/08/2010	Cheque Date: 16/08/2010
General		Taxes Data
Employee ID:	Job Title: Appliance Repair Apprentice	Description
Address: 123 Main Street Dawson City, YT	Pay Rate: \$650.00/wk Annual: \$33 800.00	Federal
		Claim Code
		1
Hours and Earnings		
	Current	
Description	Rate	Gross Earnings
Regular	\$650.00/wk	\$650.00
Before-Tax Deductions		
Description	Amt.	
Union Dues	• \$14.10	
Pension	• \$20.50	
Total	\$34.60	
Taxes		
Description	Amt.	
Federal	• \$61.15	
Provincial	• \$28.70	
CPP	• \$28.43	
EI *	• \$11.25	
Total	\$129.53	

Based on the amounts deducted for union dues and pensions, what percentage of Hermione's gross pay does she pay in union dues and what percentage does she contribute to a pension?

Do you think deductions are the same for everyone? Why or why not?

Look in the Taxes portion of the pay statement. What do CPP and EI stand for? Why do most working Canadians contribute to these plans?

The federal and provincial deductions on the pay statement are income tax payments. The amount of income tax you pay varies according to your personal circumstances and the province/territory in which you live.

ex. Gym at Miller

When you begin a new job, your employer requires you to complete a TD1 form (Personal Tax Credits Return) to determine the amount of income tax you should pay. From your TD1 exemption claims, you determine your claim code, which your employer uses to calculate your tax deductions. Many people are only able to claim the basic personal exemption, which is TD1 claim code 1.

benefits: a range of programs that benefit employees; these vary from employer to employer

In addition to paying taxes, many people pay amounts from their gross pay for a wide range of **benefits** and programs, such as dental plans and savings plans.

What are some pros and cons for having deductions like these made directly from your paycheque?

When all deductions have been made, the amount remaining—the net pay—is paid to the employee.

discount at store for employees.

DISCUSS THE IDEAS
LIFESTYLE BENEFITS



People sometimes choose a job because of its attractive lifestyle benefits.

Some workplaces provide lifestyle benefits to their employees that are connected to the nature of the business or organization. For example, educational institutions may offer free tuition to their employees for courses they offer. What other lifestyle benefits might be offered to employees, for example, at a ski resort or a golf course?

You have a 16-week contract as a lift operator at Marmot Basin in Jasper, and you will be working between 12 and 20 hours a week. Your employer offers you a choice in how you are paid: a straight wage of \$10.50/h or \$8.50/h plus a weekday season pass that has a value of \$679.00. Which one would you choose? What factors would you consider in your choice?

**ACTIVITY 2.5
PROS AND CONS OF DEDUCTIONS**

Work in pairs for this activity. If all workers received their gross pay without any deductions, what might the consequences be? Construct a table that shows the pros and cons of contributing to the Canada Pension Plan and Employment Insurance and paying federal and provincial/territorial taxes.

*2 ways
• % calc
• using table
at Canada*

Example 1

You need to calculate the Canada Pension Plan deduction for Amanda, whose pay statement is shown here. In 2008, the CPP contribution rate was 4.95% of any gross earnings above \$3500.00.

Employee Name: Amanda		
Company:	Pay Begin Date: 08/17/2008	Net Pay:
	Pay End Date: 08/23/2008	Cheque Date:

General		Taxes Data	
Employee ID:	Job Title:	Description	Federal
Address: 123 Main St. Cochrane, AB	Pay Rate: \$500.00/wk Annual: \$26 000.00	Claim Code	1

Hours and Earnings			Before-Tax Deductions		Taxes	
Description	Current		Description	Amt.	Description	Amt.
	Rate	Gross Earnings				
Regular	\$500.00/wk	\$500.00	Union Dues		Federal	
			Pension		Provincial	
			Total		CPP	? 24.75
					EI	
					Total	

x 0.0495

SOLUTION

First find the basic pay-period exemption that applies in this case.

$\$3500.00 \div 52 \text{ weeks} = \67.31

$\$500.00 - \$67.31 = \$432.69$ Subtract the basic exemption from the gross pay.

$\$432.69 \times 0.0495 = \21.42 Multiply by the CPP contribution rate.

The CPP deduction is \$21.42.

✓ don't worry

*reduces your deduction amount.
know this*

ALTERNATIVE SOLUTIONS

There are several other ways to find the amounts of the CPP deduction. The Canada Revenue Agency has an online calculator that employers may use. It also publishes a series of payroll deduction tables that employers may consult, electronically and on paper. Employers may also use specialized computer software that has built-in deduction formulas that calculate deductions automatically, once the basic exemption and payroll procedures are entered.

Example 2

Referring to Amanda's pay statement on p. 81, calculate the Employment Insurance premium that will be deducted from her weekly pay. In 2008, the EI premium rate was 1.73% of gross earnings.

SOLUTION

$$\$500.00 \times 0.0173 = \$8.65 \quad \text{Multiply the insurable earnings by the EI premium rate.}$$

The EI deduction will be \$8.65.

ALTERNATIVE SOLUTIONS

As outlined in Example 1, the Canada Revenue Agency provides several tools that can assist employers to find the deduction amounts. Information on methods of calculating EI premiums can be found at www.cra-arc.gc.ca/tx/bsnss/tpcs/pyrl/clctng/ei/menu-eng.html.

Example 3**HINT**

Remember that you need to select the income tax tables for the province or territory discussed in each problem.

The CRA website is at <http://www.cra-arc.gc.ca/>

Select "Payroll" under the "Business" heading and then select "Payroll Deductions Online Calculator."

- Calculate the amount of income tax to deduct from Amanda's paycheque. Her TD1 claim code is 1, and she lives in Alberta.
- Calculate her net pay.
- Fill in all the deductions that will be entered on her pay statement.

SOLUTION

- First, find the online Payroll Deductions Tables for your province or territory on the Canada Revenue Agency website. In this example, we use the Alberta Payroll Deduction Tables effective January 1, 2008.

- b) Look up two amounts in the tables, a federal amount and a provincial amount. Use the amount (\$500.00), the pay period (weekly), and the TD1 claim code (1) to locate the amount of tax to deduct.

Federal tax payable is \$40.15.

Provincial tax payable is \$15.90.

Subtract CPP, EI, and federal and provincial taxes from the gross wages.

$$\$500.00 - \$21.42 - \$8.65 - \$40.15 - \$15.90 = \$413.88$$

Amanda's net pay will be \$413.88.

c)

Employee Name: Amanda			Net Pay: \$413.88	
Company:	Pay Begin Date: 08/17/2008	Cheque Date: 08/23/2008		
	Pay End Date: 08/23/2008			
General			Taxes Data	
Employee ID:	Job Title:	Description	Federal	
Address: 123 Main St. Cochrane, AB	Pay Rate: \$500.00/wk Annual: \$26 000.00	Claim Code	1	
Hours and Earnings			Taxes	
	Current		Description	Current
Description	Rate	Gross Earnings	Federal	\$40.15
Regular	\$500.00/wk	\$500.00	Provincial	\$15.90
			CPP	\$21.42
			EI	\$8.65
			Total	\$86.12

Net Pay

gross pay

What % was deducted?

ALTERNATIVE SOLUTIONS

You can also calculate the federal and provincial/territorial income tax amounts manually by looking up the percentage rates in the tax tables and multiplying by the income amount. The Canada Revenue Agency also has an online calculator available at www.cra.gc.ca/pdoc. Many businesses use software that automates the calculation of government deductions.

$$\frac{\text{ded}}{\text{gross pay}} \times 100 = \boxed{} \%$$

$$\frac{86.12}{500} \times 100 = \underline{\underline{17.22\%}}$$

Q. If my gross pay is \$100, what are my deductions?

A. deds are 17.22% of gross pay
 0.1722×100
 $= \underline{\underline{\$17.22}}$

Q. if CPP is 4.95% and my gross pay is \$100, what is my CPP deduction?

A. \$4.95

Q. if EI is 1.73% of gross pay and my gross pay is \$200, what is my EI ded? \rightarrow \$3.46

\$1.73 for \$100

Q. \$346 gross pay - EI is

EI is 1.73% of gross pay

$$0.0173 \times \$346$$

$$5.9858$$

$$\boxed{\$5.99}$$

Mental Math and Estimation

You know that all your deductions add up to approximately 38% of your gross pay and you earn \$950.00 a week. Estimate what your net pay will be.

ACTIVITY 2.6 COMPARING DEDUCTIONS



This cook is preparing desserts for a work crew.

Francine, a cook who worked in a diner in Aubigny, MB, moved to Fort McMurray, AB to work as a cook on an oil rig. In Aubigny she earned \$427.00 a week. In Fort McMurray she earned \$2300.00 a month. She was paid twice monthly at both jobs.

- For each job, calculate her gross pay for each pay period. Then use the payroll deductions online calculator to determine deductions for CPP, EI, and federal and provincial taxes. What was her net pay at each job?
- On two blank pay statements, fill in all the relevant information for both jobs: gross earnings, all deductions, and net pay.
- How much more did Francine pay in taxes at the Alberta job?

Example 4

tax credits

taxable income: income on which federal and provincial/territorial tax is paid

Some benefit deductions are not taxable. For example, union dues and pension contributions are not **taxable income**.

- In the pay statement shown on p. 85, what is the person's taxable income?
- How much income tax will he or she pay?
- Using the CPP and EI amounts from Examples 1 and 2 and the income tax amount in this example, find the net pay. Assume the TD1 claim code is 1, the province is British Columbia, and the tax tables were from January 2008.

gross pay is \$720.
calc CPP ded (4.95%)
\$35.64

Alberta provincial tax deductions
 Effective January 1, 2008
 Biweekly (26 pay periods a year)
Also look up the tax deductions
in the federal table

Pay Rémunération		Provincial claim codes/Codes de déduction					
		0	1	2	3	4	5
From De	Less than Moins de	Deduct from each pay Retenez sur chaque paie					
1316 -	1332	124.20	62.05	57.50	48.45	39.35	30.25
1332 -	1348	125.70	63.55	59.00	49.90	40.85	31.75
1348 -	1364	127.20	65.05	60.50	51.40	42.30	33.25
1364 -	1380	128.70	66.55	62.00	52.90	43.80	34.70
1380 -	1396	130.20	68.05	63.50	54.40	45.30	36.20
1396 -	1412	131.70	69.55	65.00	55.90	46.80	37.70
1412 -	1428	133.20	71.00	66.50	57.40	48.30	39.20
1428 -	1444	134.65	72.50	67.95	58.90	49.80	40.70
1444 -	1460	136.15	74.00	69.45	60.35	51.30	42.20
1460 -	1476	137.65	75.50	70.95	61.85	52.75	43.70
1476 -	1492	139.15	77.00	72.45	63.35	54.25	45.15
1492 -	1508	140.65	78.50	73.95	64.85	55.75	46.65
1508 -	1524	142.15	80.00	75.45	66.35	57.25	48.15
1524 -	1540	143.65	81.50	76.95	67.85	58.75	49.65
1540 -	1556	145.15	82.95	78.40	69.35	60.25	51.15

- a) If a hotel reservations clerk in Banff, AB earns \$1392.00 biweekly and his TD1 claim code is 2, how much federal tax will be deducted from each pay?
 - b) How much provincial tax will be deducted from each pay?
 - c) If this worker earned the same amount in Fernie, BC, what information would you need to determine whether the deductions would be different?
8. Chandra works as a flight dispatcher at the Calgary airport. Her annual salary is \$37 000.00 and her TD1 claim code is 2.
- a) Calculate her biweekly gross pay.
 - b) What will her deductions be for CPP, EI, and income tax for each pay period? Use the federal and provincial tax tables shown above.
 - c) What will her net pay be?
9. Would you rather work on a straight commission basis or a salary plus commission basis? Why? What are the advantages and disadvantages of each?

Oct 5

taxable income vs non-taxable income

one is "taxable" → govt takes off
income tax
one is not.

Q. Does this change your earnings?

A. Yes

Pension - regular pay to a retired person because they contributed to a pension plan.

Pension (not CPP)

deduction → invested by your
pension provider.

Workplace ↙

→ grows

→ at retirement you
get monthly cheques
from retirement plan

→ regular income when
you are not working

Sometimes you can
receive pension early.

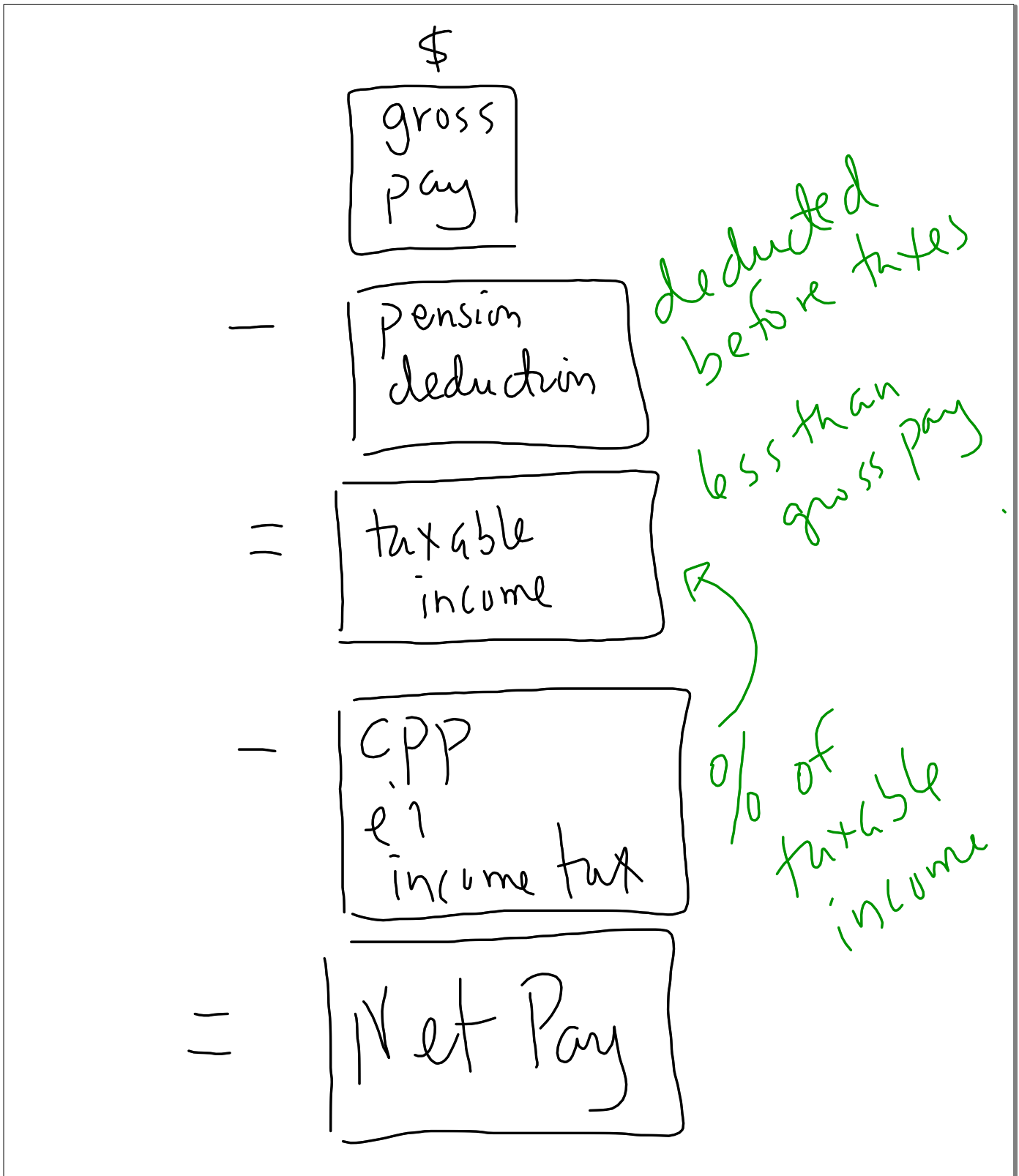
p. 87 of text

Q 1 to 7

p. 89 of text

Q 1 to 9

Classwork for today
and tomorrow...



Section B - Canada Pension Plan contributions tables

- [52 pay periods a year \(Weekly\) \[PDF\]](#)
 - [26 pay periods a year \(Biweekly\) \[PDF\]](#)
 - [24 pay periods a year \(Semi-monthly\) \[PDF\]](#)
 - [12 pay periods a year \(Monthly\) \[PDF\]](#)
- } different

biweekly is every 2 weeks

vs
semi-monthly is 2 times a month

p 87 Q 2

$$\$1458 \times \overset{24}{(2 \times 12)} = \$34992$$

twice
a
month months

$$(\$1346) \times 26 = \$34996$$

(52 ÷ 2)

→ smaller but 2 more of them.