

# ALBERTA DISTANCE LEARNING CENTRE

## Mathematics 10-3

MAT1793

### Unit A: Money Math

### Chapter 1 Lesson 2

#### Student's Questions and Comments

#### FOR STUDENT USE ONLY

Student Name:

\_\_\_\_\_

#### FOR ADLC USE ONLY

Assigned to

\_\_\_\_\_

Marked by

\_\_\_\_\_

Date received

\_\_\_\_\_

#### Summary

	Marks Earned	Total Possible Marks	Percent
Lesson 2		43	

Teacher's Comments:

\_\_\_\_\_  
Teacher's Signature

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4601 - 63 Avenue  
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## Lesson Assignment

This assignment includes fill in the blank, true and false, matching, multiple choice, and short answer questions. For multiple choice questions, select the best answer. Be sure to show all necessary work for short answer questions. You may ask for clarification from your teacher, but you will not be given the answer.

### Lesson 2

For questions 1 to 3, fill in the blanks.

- ② 1. The correct contribution rate for CPP is \_\_\_\_\_ % to a maximum annual amount of \$\_\_\_\_\_.
- ① 2. The first \$\_\_\_\_\_/year that a person earns is exempt from CPP.
- ② 3. The contribution rate for EI is \_\_\_\_\_ % to a maximum annual amount of \$\_\_\_\_\_.

For questions 4 to 6, circle the correct answer.

- ① \_\_\_\_\_ 4. Who is responsible for collecting federal and provincial income taxes?
- a. Internal Revenue Service (IRS)
  - b. Canada Revenue Agency (CRA)
  - c. Canadian Environmental Assessment Agency (CEAA)
  - d. Treasury Department (TD)
- ① \_\_\_\_\_ 5. Which of the following ways help people lower their net income?
- a. investing in registered retirement savings plans (RRSPs)
  - b. opening a tax free savings account (TSA's)
  - c. donating to charities
  - d. all of the above

- ① \_\_\_\_\_ 6. Which of the following is **not** a voluntary deduction?
- a. dental care
  - b. income tax
  - c. life insurance
  - d. union dues

For the following statements, indicate true (T) or false (F).

- ④ 7. \_\_\_\_\_ a. CPP, EI, Income Tax are deductions required by law.
- \_\_\_\_\_ b. At age 60, a person is eligible to collect full CPP benefits.
- \_\_\_\_\_ c. EI is a provincial program that insures Canadians against job loss.
- \_\_\_\_\_ d. People who are self-employed often do not contribute to EI, and are therefore not eligible to collect EI.
- \_\_\_\_\_ e. The main purpose of income tax is to pay the salaries of politicians.
- \_\_\_\_\_ f. All provinces use a flat income tax rate to calculate provincial income tax.
- \_\_\_\_\_ g. If someone makes \$50 000/year, they would be taxed using the first two tax brackets.
- \_\_\_\_\_ h. Gross pay = net pay – deductions

- ③ 8. Complete the chart.

	Gross Pay	Deductions	Net Pay
a.	\$7 352.14	\$978.57	
b.		\$261.53	\$2 573.07
c.	\$972.83		\$697.12

- ⑤ 9. David makes \$2 730.00/month. Calculate his monthly CPP and EI contributions.  
**Hint:** Find his annual gross pay first.
- ⑤ 10. Stewart is a plumber who earns \$83 000.00/year. Calculate how much income tax Stewart would pay for the year.  
**Hint:** Refer to the Income Tax Table in the *Lesson*.
- ②.⑤ 11. Allison makes \$4 457.12/month after all mandatory deductions. She also has monthly voluntary deductions of \$225.00 for an RRSP, \$125.00 for a savings plan, and \$123.54 for a dental plan. What is Allison's net monthly pay?

12. A union tradesperson was reviewing his paystub.

EARNINGS				
Description	Rate	Hrs/Days	Current	Year to Date
SALARY	19.38	173.33	3,359.20	6,408.31
CELL PHONE REIMBURSE	0.00	0.00	20.00	40.00
VACATION TAKEN	0.00	0.00	0.00	310.08
Earnings Total			3,375.20	6,758.39

DEDUCTIONS		
Description	Current	Year to Date
INCOME TAX	384.73	769.31
EMPLOYMENT INSURAN	63.15	126.30
CANADA PENSION PLA	151.84	303.68
LOCAL AUTHORITIES	349.02	698.04
EXTENDED HEALTH CA	0.00	0.00
DENTAL	0.00	0.00
VISION	0.00	0.00
LIFE CUPE	9.03	18.06
AD & D CUPE	1.21	2.42
EDE CUPE	11.66	23.32
HEALTH SPENDING AC	0.00	0.00
CUPE UNION DUES	50.09	100.78
STAFF FEES F & T	5.00	10.00
Deduction Totals		
	1,025.73	2,051.91

EMPLOYER PAID BENEFITS		
Description	Current	Year to Date
EMPLOYMENT INSURANCE	81.02	162.04
CANADA PENSION PLAN	151.84	303.68
LOCAL AUTHORITIES PENSION	382.61	765.22
EXTENDED HEALTH CARE	211.75	423.50
DENTAL	137.75	275.50
VISION	22.50	45.00
EDO CUPE	44.08	86.16
HEALTH SPENDING ACCOUNT	30.00	60.00
Employee Paid Benefit Totals		1,061.55
		2,123.10

DEPOSIT DATE 28-FEB-2014	
NET PAY 2,353.47	
PAY PERIOD 201404	
BANK #1	2,353.47
BANK #2	0.00

①.5

a. What types of mandatory deductions did he pay?

②

b. What types of voluntary deductions did he pay?

②

c. What benefits does the employee receive that are paid entirely by the employer?

13. Kate is a nurse who earns \$75 961.60/year. She has a weekly deduction of \$75.00 off of her paycheque for a savings plan. She wanted to calculate her net monthly net pay. Here are her calculations.

### Kate's Calculation

#### Step 1:

$$\begin{aligned} CPP &= \$75\,961.60 \times 0.0495 \\ &= \$3\,760.10 \end{aligned}$$

#### Step 2:

$$\begin{aligned} EI &= \$75\,961.60 \times 0.0188 \\ &= \$1\,428.08 \end{aligned}$$

#### Step 3:

$$\begin{aligned} \text{Income tax} &= \text{first bracket tax} + \text{second bracket tax} \\ &= (\text{tax rate} \times \text{first bracket pay}) + (\text{tax rate} \times \text{second bracket pay}) \\ &= (25\% \times \$43\,561.00) + (32\% \times 32\,400.60) \\ &= (0.25 \times \$43\,561.00) + (0.32 \times 32\,400.60) \\ &= \$10\,890.25 + \$10\,368.19 \\ &= \$21\,258.44 \end{aligned}$$

#### Step 4:

$$\begin{aligned} \text{annual net pay} &= \$75\,961 - CPP - EI - \text{Income tax} \\ &= \$75\,961.60 - \$3\,760.10 - \$1\,428.08 - \$21\,258.28 \\ &= \$49\,514.98 \end{aligned}$$

#### Step 5:

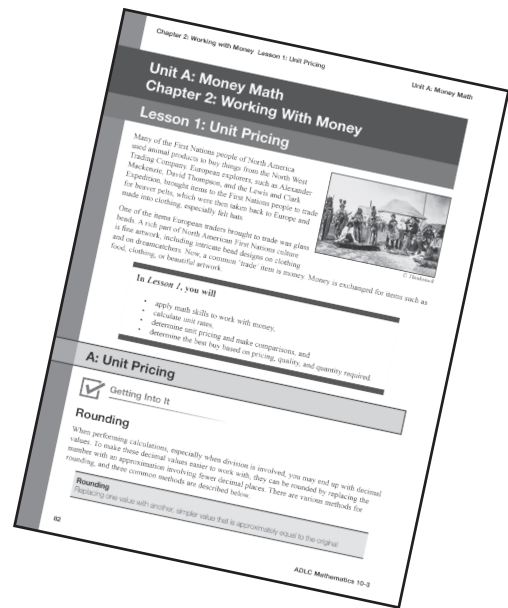
$$\begin{aligned} \text{monthly net} &= \frac{\$49\,514.98}{12} \\ &= \$4\,126.25 \end{aligned}$$

**Kate made 5 errors** in her calculations. For each error, make the correction.

**Hint:** There may not be an error in each step.

Step number	Is there an error/errors in this step (yes or no)	If there is an error, provide the correct calculation and/or state the correct process
1		The total CPP to be paid is .
2		The total EI to be paid is .
3		The total income tax to be paid is .
4		Net Pay =
5		Monthly Pay=

You have completed *Lesson 2 Assignment*. Please return to the *Module* and continue your exploration with *Chapter 2: Working With Money*.



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Alberta Distance  
Learning Centre

**adlc.ca**  
1-866-774-5333  
info@adlc.ca

Alberta Distance Learning Centre  
Box 4000 4601 – 63 Avenue  
Barrhead, Alberta T7N 1P4

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