



TODAY AND TOMORROW - REVIEW  
 WED           SUMMATIVE  
 THURS        SUMMATIVE  
 FRIDAY       SUMMATIVE and ASSEMBLY  
 MONDAY      SUMMATIVE  
 TUESDAY     SUMMATIVE  
 WEDNESDAY NO MORE CLASS

### Grade 11 Workplace Math Review

Using a newspaper or the internet, research a job that you will be qualified to do **after you graduate high school**, for which you are paid an hourly rate. Cut out the job advertisement or print it out.

Job: \_\_\_\_\_ Hourly Rate: \_\_\_\_\_

Estimate the **number of hours** you will work in a **month**: \_\_\_\_\_

Calculate your **gross monthly income**: \_\_\_\_\_

1. What is the difference between your gross income and your net income?

Your gross income is the amount they pay you and the net income is the amount you get to keep after the deductions are taken off.

2. What are the deductions you should expect to have taken off your paycheck?

### Income Tax - Federal and Provincial

Government of Ontario - provincial

-schools, hospitals, roads and bridges

Government of Canada - federal

-military, gives aid to foreign countries in need

### CPP - Canadian Pension Plan

- money that is given to seniors when they retire

### EI - Employment Insurance

- money that goes towards people who lose their jobs

<http://www.cra-arc.gc.ca/tx/bsnss/tpcs/pyrll/t4032/jn12/menu-eng.html>

[http://www.cra-arc.gc.ca/tx/bsnss/tpcs/pyrll/t4032/jn12/on-pp4032\\_12.pdf](http://www.cra-arc.gc.ca/tx/bsnss/tpcs/pyrll/t4032/jn12/on-pp4032_12.pdf)

2099.73 (2100) 2100.27

3. If your gross income is \$2100 a month, determine your deductions.

\$38.43

-\$87.51

CPP

2099.44 - 2099.63	89.49
2099.64 - 2099.84	89.50
2099.85 - 2100.04	89.51
2100.05 - 2100.24	89.52
2100.25 - 2100.44	89.53
2100.45 - 2100.64	89.54
2100.65 - 2100.85	89.55

2099.85 2100.00 2100.01

Insurable Earnings Rémunération assurable		EI premium Cotisation d'AE	Insurable Earnings Rémunération assurable		EI premium Cotisation d'AE
From - De	To - À		From - De	To - À	
2046.18 - 2046.72	37.45	2085.52 - 2086.06	38.17		
2046.73 - 2047.26	37.46	2086.07 - 2086.61	38.18		
2047.27 - 2047.81	37.47	2086.62 - 2087.15	38.19		
2047.82 - 2048.36	37.48	2087.16 - 2087.70	38.20		
2048.37 - 2048.90	37.49	2087.71 - 2088.25	38.21		
2048.91 - 2049.45	37.50	2088.26 - 2088.79	38.22		
2049.46 - 2049.99	37.51	2088.80 - 2089.34	38.23		
2050.00 - 2050.54	37.52	2089.35 - 2089.89	38.24		
2050.55 - 2051.09	37.53	2089.90 - 2090.43	38.25		
2051.10 - 2051.63	37.54	2090.44 - 2090.98	38.26		
2051.64 - 2052.18	37.55	2090.99 - 2091.53	38.27		
2052.19 - 2052.73	37.56	2091.54 - 2092.07	38.28		
2052.74 - 2053.27	37.57	2092.08 - 2092.62	38.29		
2053.28 - 2053.82	37.58	2092.63 - 2093.16	38.30		
2053.83 - 2054.37	37.59	2093.17 - 2093.71	38.31		
2054.38 - 2054.91	37.60	2093.72 - 2094.26	38.32		
2054.92 - 2055.46	37.61	2094.27 - 2094.80	38.33		
2055.47 - 2056.01	37.62	2094.81 - 2095.35	38.34		
2056.02 - 2056.55	37.63	2095.36 - 2095.90	38.35		
2056.56 - 2057.10	37.64	2095.91 - 2096.44	38.36		
2057.11 - 2057.65	37.65	2096.45 - 2096.99	38.37		
2057.66 - 2058.19	37.66	2097.00 - 2097.54	38.38		
2058.20 - 2058.74	37.67	2097.55 - 2098.08	38.39		
2058.75 - 2059.28	37.68	2098.09 - 2098.63	38.40		
2059.29 - 2059.83	37.69	2098.64 - 2099.18	38.41		
2059.84 - 2060.38	37.70	2099.19 - 2099.72	38.42		
2060.39 - 2060.92	37.71	2099.73 - 2100.27	38.43		

Income Tax

Federal

147.40

2023 - 2041	272.60	137.35	124.40
2041 - 2059	275.15	139.85	126.95
2059 - 2077	277.65	142.35	129.45
2077 - 2095	280.15	144.85	131.95
2095 - 2113	282.70	147.40	134.50
2113 - 2131	285.20	149.90	137.00
2131 - 2149	287.70	152.45	139.50
2149 - 2167	290.25	154.95	142.05
2167 - 2185	292.75	157.45	144.55
2185 - 2203	295.25	160.00	147.05

Provincial

0 1 2

2038 - 2056	119.90	80.35	76.05
2056 - 2074	121.85	82.25	78.00
2074 - 2092	123.75	84.20	79.95
2092 - 2110	124.65	85.05	80.80
2110 - 2128	125.50	85.90	81.65

85.05

4. Complete the table below to calculate your **net** monthly income.

Gross Monthly Income			\$ 2100	
Deductions	EI	\$	38.43	
	CPP	\$	89.51	
	Federal	\$	147.40	
	Provincial	\$	85.05	
Total Deductions			<del>360.39</del>	
Net Monthly Income			<del>345.88</del>	\$ 1739.61

(Gross - Deductions) / 360.39

5. Give examples of essential and **non-essential** expenses and **fixed** and **variable** expenses.

Essential	Non-Essential	Fixed	Variable
food-groceries rent insurance shelter phone basic clothing	food court 10 pairs of jeans cell phone ipod PS baseball hat	rent car payment gym membership car insurance lease payment bus pass	-groceries -clothing -entertainment -gas

You want to buy a new tablet. It regularly costs \$349.00 but it is currently on sale for 33% off. What is the sale price of the tablet?

$\div 100 = 0.33$

Discount = 33% of price  
 $= 33 \div 100 \times 349$   
 $= \$115.17$

Sale Price =  $349 - 115.17$   
 $= \$233.83$       \$) 115.17  
 The tablet now cost \$233.83

You want to buy some new socks that cost \$4.00 a pair. The store is having a special - buy 3 pairs get 1 free.

a) If you want to buy 8 pairs of socks, how much does this cost?

Pay for 6  
 Price for 6 =  $6 \times 4$   
 $= 24.00$

b) What is the price per pair?

You pay \$24.00 but you get 8 socks  
 \$24 for 8 socks  
 ? for 1 sock      Price =  $\frac{24}{8}$   
 $= 3$

~~$\frac{24}{x} = \frac{8}{1}$~~   
 $1 \times 24 = 8 \times x$   
 $\frac{24}{8} = \frac{8 \times x}{8}$   
 $3 = x$

It costs pair of \$3 / sock.

8. You have \$1000 in your bank account. You go to the mall to buy three things – a TV, a purse and a baseball hat.

a) Calculate the after tax cost of all three items.

HST = 13%

Item	Tax	After Tax Cost
TV - \$499.00	$\text{tax} = 13\% \text{ of price}$ $= 13 \div 100 \times 499$ $= 64.87$	$\text{After Tax Cost} = 499 + 64.87$ $= \$563.87$
Purse - \$43.95	$\text{tax} = 13\% \text{ of } 43.95$ $= 13 \div 100 \times 43.95$ $= 5.71$	$\text{After Tax Cost} = 43.95 + 5.71$ $= \$49.66$
Baseball Hat - \$17.99	$\text{tax} = 13\% \text{ of } 17.99$ $= 13 \div 100 \times 17.99$ $= 2.34$	$\text{After tax cost} = 17.99 + 2.34$ $= 20.33$
TOTAL		\$633.86

b) How much money do you have left after your day of shopping?

$$\text{Remaining} = 1000 - 633.86$$

$$= \$366.14$$

9. Convert the following prices from US dollars to Canadian dollars.

Item and Price in US \$	Exchange Rate	Price in CAN \$
Video Game - 29.89	\$1 US = \$1.04 CAN	$29.89 \text{ US} = ? \text{ CAN}$ $1 \text{ US} = 1.04 \text{ CAN}$
Running Shoes	\$1 US = \$0.97 CAN	<del> <math>\frac{29.89}{1} = \frac{x}{1.04}</math> </del> $x = \$31.09$

\$65 US

$65 \text{ US} = ? \text{ CAN}$   
 $1 \text{ US} = 0.97 \text{ CAN}$

~~55.12~~

~~$\frac{65}{1} = \frac{x}{0.97}$~~  
 $63.05 = x$

\$52

1.06 US = 1 CAN

$\$52 \text{ US} = ? \text{ CAN}$   
 $1.06 \text{ US} = 1 \text{ CAN}$

$\frac{52}{1.06} = \frac{x}{1}$

\$49.06 = x



**10. Enter the necessary values in the images below to calculate the problems below.**

- a) Junior invests \$5000 in a bank account that pays 3.2% interest per year compounded quarterly. If he leaves the money in the account for 3 years, how much will his investment be worth?

Future Value:	<input type="text"/>	Calculate
Present Value:	<input type="text"/>	Calculate
Interest Rate percent (per year):	<input type="text"/>	Calculate
Payments per year:	<input type="text"/>	
Payment per period:	<input type="text"/>	Calculate
Total # of payments (30 years =360, 15 years =180):	<input type="text"/>	Calculate

- b) Brittany invests \$ 100 each month for 4 years. The account pays 5.4% interest per year compounded monthly. How much will she have at the end of 4 years?

Future Value:	<input type="text"/>	Calculate
Present Value:	<input type="text"/>	Calculate
Interest Rate percent (per year):	<input type="text"/>	Calculate
Payments per year:	<input type="text"/>	
Payment per period:	<input type="text"/>	Calculate
Total # of payments (30 years =360, 15 years =180):	<input type="text"/>	Calculate

- c) Mugtaba borrows \$6000 to buy a car. She makes monthly payments for 5 years to pay it off. If the loan has a 8.2% interest rate compounded monthly, what is his monthly payment?

Future Value:	<input type="text"/>	Calculate
Present Value:	<input type="text"/>	Calculate
Interest Rate percent (per year):	<input type="text"/>	Calculate
Payments per year:	<input type="text"/>	
Payment per period:	<input type="text"/>	Calculate
Total # of payments (30 years =360, 15 years =180):	<input type="text"/>	Calculate

How much does Mugtaba pay for the car in total?

How much interest does he pay?

11. If you can invest your money in a bank that pays 2% interest per year compounded semi-annually or in a different bank that pas 2% interest per year compounded weekly, which would you choose? Justify your answer.

12. List the **advantages and disadvantages** of credit cards below.

Advantages	Disadvantages

13. What are some of the factors that can affect your credit rating?


14. Use the formula  $\text{Speed} = \frac{\text{Distance}}{\text{time}}$  to complete the table below.

Speed	Distance	Time
	200 km	2.5 hours
120 km/h		4 hours
60 km/h	350 km	

15. Complete the table below if gas costs \$1.23/L

Distance	Fuel Consumption	Litres Used	Cost
300 km	6.5L/100km		
45 km	9.1L/100km		

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