

Grade 12 FOM

Fall 2026

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Unit 1: FINANCE



Name:

Lesson Outline
Review Percentages
Understanding Inflation
Review Compound Interest
Mortgages
Credit Cards
Investing with the TSX
Financial Portfolio

Lesson 1: Review Benchmark Percentages

Benchmarks: 25%; 50%; 75%

Use mental arithmetic only to complete the table:

	25%	50%	75%	100%
\$12				
\$200				
\$80				
\$5				
\$3000				
\$60				
\$32				

Again, using mental arithmetic only, put the following fractions into the correct box in the table below:

Fractions:

$\frac{3}{60}$; $\frac{73}{80}$; $\frac{23}{32}$; $\frac{7}{8}$; $\frac{4}{12}$; $\frac{44}{200}$; $\frac{11}{12}$; $\frac{5}{16}$; $\frac{19}{32}$; $\frac{3}{5}$; $\frac{37}{80}$; $\frac{3}{16}$;

Less than 25%	Between 25% and 50%	Between 50% and 75%	Between 75% and 100%

Calculating % of quantities using mental arithmetic

For the most part we use technology for calculations of interest. However, fluency with technology is rooted in number sense – knowing when to add, multiply, subtract or divide. Also, we often round awkward values to easy values to use mental arithmetic as a checking mechanism for complex calculations.

The easy percentages to calculate with mental arithmetic are:

1%	Divide by 100
10%	Divide by 10
50%	Divide by 2

These are building blocks to other percentages such as:

25%	Half of 50%
5%	Half of 10%
15%	10% plus 5%
12%	10% plus 1% plus 1%
75%	50% plus 25%

And so on...

Without using a calculator, calculate these percentage values:

15% of \$80	10% is 8 then 5% is 4 so 15% is 12	\$12
11% of \$80		
12% of \$60		
75% of \$300		
90% of \$300		
9% of \$200		
1% of \$200,000		
21% of 84,000		

A house is on the market for \$840,000.

Property sales tax is 1% on the first \$200,000; 2% on the portion greater than \$200,000. How much does the buyer need to pay as tax when they buy this house?

Increasing a number by a percentage

100% of a number is the number itself.

50% of a number is half of the number.

150% of a number is

Eg, 150% of 20 is $(100\% \text{ of } 20) + (50\% \text{ of } 20) = 20 + 10 = 30$.

Eg, 110% of 20 is $(100\% \text{ of } 20) + (10\% \text{ of } 20) = 20 + 2 = 22$.

Without using a calculator, calculate:

Question	Working	Answer
150% of \$12		
110% of \$200		
105% of 80		
101% of \$400		
200% of \$400		
102% of \$50		
108% of \$2000		
107% of \$4,000,000		

Finally, you may use a calculator to complete this table:

110% of \$500	(a)
110% of the answer in (a)	(b)
110% of the answer in (b)	(c)
110% of the answer in (c)	(d)
110% of the answer in (d)	(e)

Check your answer in (e) by typing 500×1.1^5 into your calculator.

What's Left?

Jen is 17.

Jen works part time at a Pizza restaurant.

Her usual hours are Fridays & Saturdays, 7.30pm to 2:30 am.

She gets a pay check every two weeks.

She has an older sibling (19) and one younger sibling (11), and all of them have birthdays in the summer.

She gets paid by the hour. The standard rate is \$12 per hour, however she gets time and a half after midnight*.

The whole family are keen rugby players. Jen used to play on a team, but now her part time work and her studies are taking up all her time.

Jen's favorite food used to be pizza, but now she gets to eat pizza so much she chooses sushi over pizza.

She has to pay EI (employment insurance). This is 1.66% of her income. This is deducted from her pay.

Because she works more hours in the summer time, her income exceeds \$12000 per year, and so she gets tax deducted from her pay roll. The tax deduction on each pay check is \$23.

Every time Jen is paid, she puts 10% (after tax) into a pension; and 20% (after tax) into a savings account that she intends to use when she graduates from school to either buy a car or go on a trip somewhere like France or Australia. Really, she's keeping her options open.

Jen would like to go to college, maybe to study biology or perhaps journalism. Once again, she's not sure so she's keeping her options open. For a while she thought she'd like to be a physiotherapist.

She has decided that the remainder of her paycheck she can use however she wants, however she knows that as soon as she turns 18 her parents are going to request a contribution towards her keep (food/utility bills etc) *and* she'll have to pay CPP (Canada Pension Plan).

From any one paycheck, how much does Jen consider 'disposable income'?

*time and a half – 1.5 times your normal pay rate.

Lesson 2: Inflation and the Consumer Price Index

Links required:

Inflation calculator: <https://www.bankofcanada.ca/rates/related/inflation-calculator/>

Understand inflation: <https://www.bankofcanada.ca/2020/08/understanding-inflation/>

CPI Interactive pie chart: <https://www150.statcan.gc.ca/n1/pub/71-607-x/2018016/cpi-ipc-eng.htm>

CPI video, bank of Canada: <https://www.youtube.com/watch?v=b2AnmVZjHZg>

CPI video, StatCan: <https://www150.statcan.gc.ca/eng/sc/video/cpi>

Over time the amount of goods person can buy for a certain amount of money changes. This is due to inflation.

What item/s could you buy today with one \$100 bill?

What items have you noticed or heard others refer to as becoming particularly expensive recently?

Click this link to find out how much \$100 worth of goods in 1926 would be worth today:

<https://www.bankofcanada.ca/rates/related/inflation-calculator/>

A "basket" of goods and services

...that cost:	\$	100.00	in	1926
...would cost:	\$	Answer	in	2026
		Clear	Calculate	

What is inflation? From the Bank of Canada:

Inflation is a persistent rise in the average level of prices over time.

Benefits of low inflation

Low, stable and predictable inflation is good for the economy—and for your finances. It helps money keep its value and makes it easier for everyone to plan how, where and when they spend.

For example, companies are more likely to grow their business when they know what their costs will be in the years ahead. This helps the economy expand at a sustainable pace, generating higher incomes and new jobs.

How inflation works

Prices tend to go up when the demand for goods and services is more than the economy supplies.

Prices tend to go down when the economy supplies more goods and services than people want or need.

When prices change so slowly that they don't affect how people spend, save or invest, the Bank of Canada considers this **price stability**.

Effects of high inflation

When prices go up, money can't buy as much as it used to. This loss of purchasing power hurts everyone's standard of living.

When inflation is high, consumers, businesses and investors are uncertain about what their costs will be from one day to the next. High inflation is often unstable and unpredictable, and that keeps the economy from performing at its best.

High inflation makes life especially hard for people whose incomes don't keep pace with rising prices, such as pensioners and those with low pay. This is because high inflation decreases the value of their incomes and savings.

Effects of deflation

A persistent decline in the level of prices can also have a negative impact on the economy. This is called **deflation**. It is usually a sign that something is seriously wrong with the economy. Deflation leads to lower production and wages. This reduces demand from consumers and businesses, which then leads to still lower prices, and so on.

The one major episode of sustained deflation in Canada was in the 1930s, during the Great Depression. A dramatic drop in spending triggered a decline in prices of more than 20 percent over four years.

The rate of inflation

To measure inflation, we look at the [consumer price index \(CPI\)](#) and how quickly it is rising. For example:

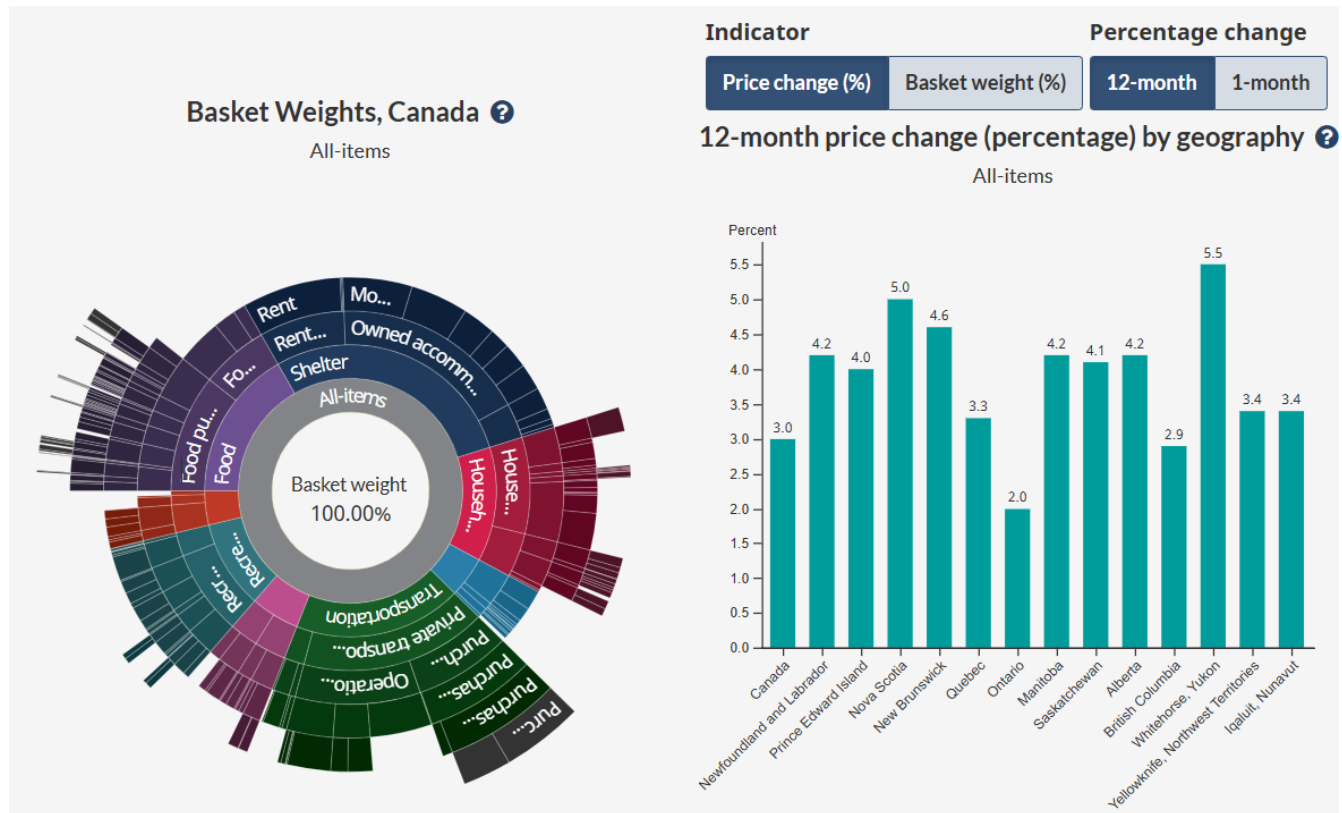
- In one year, the basket of goods and services the CPI uses costs **\$100**.
- The next year, the same basket costs **\$102**. That means the average annual rate of inflation is **2 percent**.

At the Bank, we target a 2 percent inflation rate, the middle of a 1 to 3 percent range. We have agreed with the federal government that this is the best way for us to promote the economic and financial well-being of Canadians.

source: <https://www.bankofcanada.ca/2020/08/understanding-inflation/>

What is the Consumer Price Index (CPI)?

Watch <https://www.youtube.com/watch?v=b2AnmVZjHZg> or <https://www150.statcan.gc.ca/eng/sc/video/cpi>



Open the pie chart here: <https://www150.statcan.gc.ca/n1/pub/71-607-x/2018016/cpi-ipc-eng.htm>

What percentage of the 'basket' do consumers (all Canada) spend on food?

What percentage of the 'basket' do consumers in PEI spend on food?

What price change % did consumers in PEI experience over the last 12 months?

What province/territory experience the greatest price change % over the last 12 months on food?

What percentage of the 'basket' do consumers spend on clothing?

How many of the provinces or territories have experienced 'ideal inflation' on clothing in the last 12 months (that is, between 1% and 3% inflation)?

What province or territory experienced the greatest inflation on the price of cheese in the last 12 months?

List two other interesting facts you notice from the interactive pie chart:

1

2

Lesson 3: Review Compound Interest interest

Watch <https://youtu.be/U0Lwyh9ONMM>

\$100 placed under a pillow one year later is still \$100. Due to inflation, it is the same amount of dollars but it won't buy as much as it used to.

\$100 put into a savings account will grow because banks offer interest. They offer interest to make it worth your while to let them use your money. The bank invests your money and makes more on it than the interest they offer you. It's a win-win situation, with the bank winning more.

The interest the bank puts on your money is compounded. They pay interest on any previously earned interest.

Here's how compound interest works:

Example 1: Let's deposit into an account that offers interest compounded annually for five years.

Money to start the year:	Calculation	Balance at the end of the year:

We can short-cut those calculations using exponents:

And we can use a finance calculator to do those calculations too:

TVM Calculator

Advanced Version

Annual Rate ☒ Nominal ☐ Effective

Mode ☒ End ☐ Beginning

Present Value

Payments

Future Value

Annual Rate (%)

Periods

Compounding

Banks usually pay interest more regularly than once per year. We often use the letter ‘n’ to stand for the number of times they pay interest in a year.

Description	Value
Annual	1
Semiannual	2
Quarterly	4
Monthly	12
Weekly	52
Daily	365

Example 2:Let’s deposit into an account that offers interest compounded semi-annually for five years. This means calculating a new balance twice each year:

Money to start the half-year:	Calculation	Balance at the end of the half-year:

Example 2, with a formula:

Example 2, with a finance calculator:

TVM Calculator

Advanced Version

Annual Rate

☒ Nominal
 ☐ Effective

Mode

☒ End
 ☐ Beginning

Present Value

PV

Payments

PMT

Future Value

FV

Annual Rate (%)

Rate

Periods

Periods

Compounding

Annually

The compound interest formula:

$$FV = PV \times \left(1 + \frac{r}{n}\right)^{n \times t}$$

The letters stand for:

Future Value	<i>FV</i>
Present Value	<i>PV</i>
rate of interest as a decimal	<i>r</i>
compounding periods per year	<i>n</i>
number of years	<i>t</i>

Let's practice. Use the formula, then check the online calculator.

1. Invest \$4000 for 9 years at a rate of 2.5% per annum, compounded semi-annually.

P = r (decimal) = n, periods per year = t, number of years =

2. Invest \$2400 for 4 years, at a rate of 1.4 % per annum, compounded monthly.

P = r (decimal) = n, periods per year = t, number of years =

3. Invest \$12000 for 40 years at a rate of 7% per annum, compounded quarterly.

P = r (decimal) = n, periods per year = t, number of years =

4. A debt of \$11400 for one year, at a rate of 9.8 per annum compounded monthly.

P = r (decimal) = n, periods per year = t, number of years =

To calculate the amount required to reach a particular goal, we can use the formula

$$PV = FV \div \left(1 + \frac{r}{n}\right)^{n \times t}$$

To calculate the \$ interest made on an investment, we use $Interest = FV - PV$

5 Calculate the principle value of an investment worth \$6344.22 after 25 years in a bank that offers interest rate of 4.1% p/a, compounded semi annually.	6 Calculate the interest on an investment of \$1500 after 25 years at an interest rate of 4.5% p/a, compounded semi annually.
7 Calculate the future value of an investment of \$4900 after 30 years at an interest rate of 5.3% p/a, compounded semi annually.	8 Calculate the future value of an investment of \$600 after 35 years at an interest rate of 8.8% p/a, compounded quarterly.
9 Calculate the principle value of an investment worth \$9526.43 after 10 years in a bank that offers interest rate of 2.8% p/a, compounded daily.	10 Calculate the interest on an investment of \$3400 after 10 years at an interest rate of 3.3% p/a, compounded monthly

11. Jessica decides to put \$500 into a savings account on June 1st **each year** that offers 4.5% interest per annum, beginning June 2027. How much is her investment worth on 31st May 2032?

Lesson 4: Setting the scene, Progressive Taxation

Progressive taxation is a tool used by government to distribute wealth. On its own, it does not distribute wealth very effectively.

Websites reference in this lesson:

<https://www150.statcan.gc.ca/n1/daily-quotidien/250716/dq250716a-eng.htm>

<https://thefeatureofaplan.com/canadian-savings/>

<https://worldpopulationreview.com/country-rankings/gini-coefficient-by-country>

<https://www.oxfam.ca/publication/canadas-wealth-inequality-report/>

The goal of this lesson is to understand the math of progressive taxation and see how it is applied to employment income.

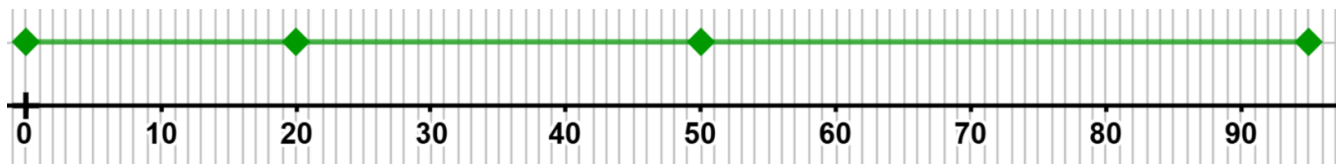
The Hoodie Tax Experiment

	Hoodies are subject to sales tax in BC at 12%. (5% goods and services, 7% Provincial sales tax). Price tag: \$95 Tax: 12% of \$95 = $12 \div 100 \times 95 =$ Price to pay =
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Let's suppose that **progressive taxation** was applied to clothing, with these **tax brackets**: (IT ISN'T)

\$0 to \$20	0%
\$20 to \$50	10%
\$50 to \$200	25%
over \$200	50%

We need to break the price of the hoodie into up to four categories:

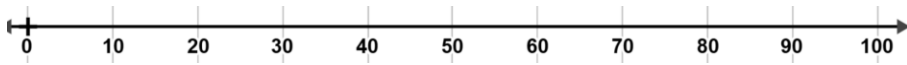
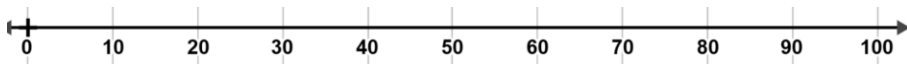
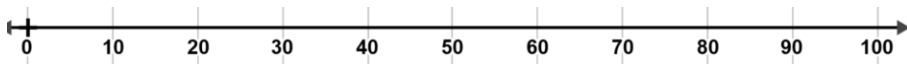


Total tax to pay =

Marginal tax rate =

Average tax rate =

Let's try that out with these hoodies to see how the people buying the most expensive hoodies need to pay an *increasing* amount of tax as the price gets higher:

 Quick Look  NOW \$18.88 WAS[±] \$26.97		Total tax to pay = Marginal tax rate = Average tax rate =
 Quick Look  NOW \$38.97 WAS[±] \$64.99		Total tax to pay = Marginal tax rate = Average tax rate =
 Quick Look  \$74.99		Total tax to pay = Marginal tax rate = Average tax rate =
 MACKAGE Krystian Hoodie \$390		Total tax to pay = Marginal tax rate = Average tax rate =

Progressive taxation isn't applied to clothing. There are probably good reasons why not.

Progressive taxation is applied to any income you receive over the year – employment income or interest on investments. Here are the tax brackets for personal income in BC:

Income range	Tax Rate
\$0 to \$13,216	0.00%
\$13,217 to \$16,452	5.06%
\$16,453 to \$50,363	19.06%
\$50,364 to \$58,523	21.70%
\$58,524 to \$100,728	28.20%
\$100,729 to \$115,648	31.00%
\$115,649 to \$117,045	32.79%
\$117,046 to \$140,430	38.29%
\$140,431 to \$181,440	40.70%
\$181,441 to \$190,405	43.99%
\$190,406 to \$258,482	46.09%
\$258,483 to \$265,545	49.80%
\$265,546 and up	53.50%

There are seven tax brackets for BC provincial tax and five federal tax brackets.

...this is why we made a simplified example using a hoodie.

Notice that for income over \$13000 in one year, you pay the 5 cents tax for every dollar you earn.

Notice that once you start earning \$250,000 in a year, you start paying 50 cents for every dollar you earn.

The tax that comes off of your paycheck is an estimate. You either have to pay more or get refunded when you file your taxes in April each year.

Use an online calculator to explore the income tax for these jobs:

Choose a job: <https://ca.indeed.com/career/salaries?from=gnav-jobsearch--indeedmobile>

Income tax calculator

Job	Annual Tax in 2025
Warehouse Associate Average salary \$40,368 per year	Annual tax as a dollar amount: Marginal tax rate (%): Average tax rate (%): Net annual salary:
Accountant Average salary \$65,457 per year	Annual tax as a dollar amount: Marginal tax rate (%): Average tax rate (%): Net annual salary:
Software Engineer Average salary \$105,803 per year	Annual tax as a dollar amount: Marginal tax rate (%): Average tax rate (%): Net annual salary:
	Annual tax as a dollar amount: Marginal tax rate (%): Average tax rate (%): Net annual salary:
	Annual tax as a dollar amount: Marginal tax rate (%): Average tax rate (%): Net annual salary:
	Annual tax as a dollar amount: Marginal tax rate (%): Average tax rate (%): Net annual salary:

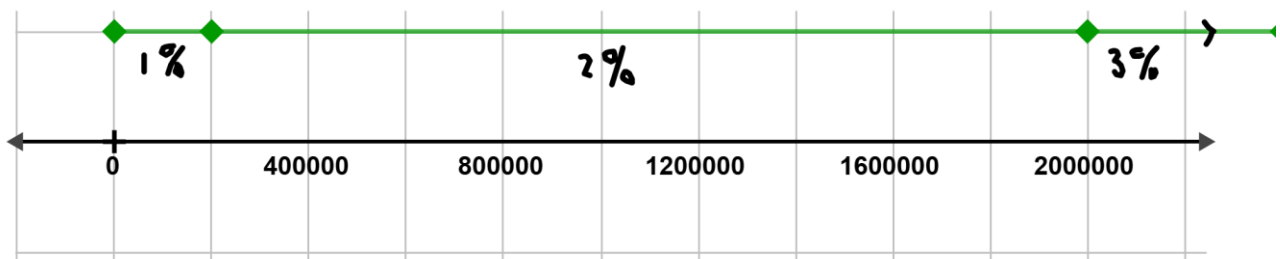
Lesson 5: Property Transfer Tax

Progressive taxation is applied to the sale price when you purchase a home (property transfer tax).

First time home buyers can usually qualify to be exempt from paying all or some property transfer tax. Otherwise, homebuyers need to be prepared to pay property transfer tax.

The tax brackets are:

- 1% of the fair market value up to and including \$200,000
- 2% of the fair market value greater than \$200,000 and up to and including \$2,000,000
- 3% of the fair market value greater than \$2,000,000



Example 1:



\$519,900

113 3582 Ryder Hesjedal Way,
Colwood, British Columbia

$$\text{Bracket 1: } 200000 \times 0.01 =$$

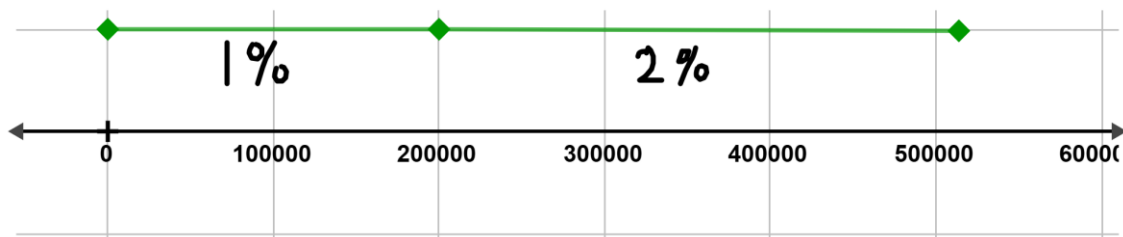
$$\text{Bracket 2: } (519900 - 200000) \times 0.02 =$$

Total property transfer tax:

Other fees (Inspection, appraisal, legal) $\approx$ 3000

Total amount to pay (price + tax + fees) =

Up front costs: 5% purchase price + tax + fees =



Example 2:



\$3,229,000

1244 Beach Dr, Oak Bay, British Columbia

Bracket 1: $200000 \times 0.01 =$

Bracket 2: $(2000000 - 200000) \times 0.02 =$

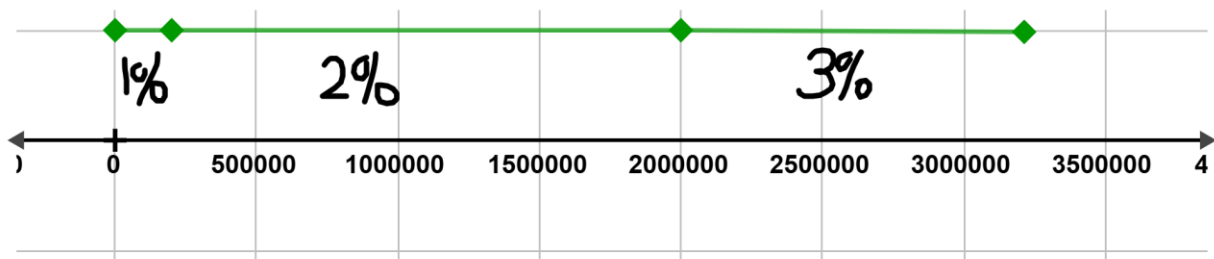
Bracket 3: $(3229000 - 2000000) \times 0.03 =$

Total property transfer tax:

Other fees (Inspection, appraisal, legal) ≈ 3000

Total amount to pay (price + tax + fees) =

Up front costs: 20% purchase price + tax + fees =



'Up front costs' include a downpayment on a mortgage + property transfer tax + fees. A minimum downpayment is calculated as follows:

On a purchase price under \$500,000	5%
On the purchase price between \$500,000 and 1.5m	10%
Houses valued over \$1.5m	20% of the total.

Go to realtor.ca. Choose homes as directed below. Calculate the 'up front purchase costs' of each home you choose.

1. Find a home in BC that is valued at \$200,000 or less.
2. Find a home in BC that is valued between \$500,000 and \$1,500,000.
3. Find a dream home for you somewhere in BC. Show your calculations in the table on page 18.

1. A home valued at \$200,000 or less

Location: Sale price = Picture:	Property transfer tax calculation: Property transfer tax = Other Fees = \$3000 Total purchase price = \$ Minimum downpayment = \$ Up-front costs: Tax + Fees + Downpayment = \$
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2. A home valued between \$500,000 and \$1,500,000

Location: Sale price = Picture:	Property transfer tax calculation: Property transfer tax = Other Fees = \$3000 Total purchase price = \$ Minimum downpayment = \$ Up-front costs: Tax + Fees + Downpayment = \$
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3. Your dream home

Location: Sale price = Picture:	Property transfer tax calculation: Property transfer tax = Other Fees = \$3000 Total purchase price = \$ Minimum downpayment = \$ Up-front costs: Tax + Fees + Downpayment = \$
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Lesson 6: Understanding First Nations Relationship to Land

'Land ownership' is a practice that Europeans brought with them when they colonized North America. Non-Indigenous people in Canada don't necessarily realise that this arrangement is not the only possible way to live in society with others. To understand why land ownership can be a barrier to reconciliation we have to understand Indigenous relationship to land. We also need to understand non-Indigenous relationship to land.

"In many Indigenous cosmologies, physical geography – the soil, earth, mountains, rivers, ecological non-human organic matter – are understood as animate and powerful, constitutive of human life, but certainly not defined by us or behooved to us" *Determinants of Indigenous Peoples Health*, Greenwood et al, p193

From *Indigenous Corporate Training*, <https://www.ictinc.ca/blog/first-nation-relationship-to-the-land> :

First Nations' Relationship to the Land

Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard. (Article 25, United Nations Declaration of Rights of Indigenous Peoples)

Read:

- [What does Indigenous connectivity mean?](#)
- [Indigenous Peoples Worldviews vs Western Worldviews](#)

Since time immemorial, First Nations have had an intricate, respectful, spiritually and physically dependent, grateful, and protective tie to the land. The nature of this tie is not so much one of ownership but one of stewardship. They feel they have been bestowed with a responsibility for the land (and sea) and all of the creatures that inhabit the land with them. This sense of responsibility is greater than an emotional tie – it is intrinsically tied to the spirits of all aspects of the earth. [Traditional knowledge](#), languages, cultural practices and [oral traditions](#) built up over the millennia are all connected to the land. If that connection, that umbilical cord, is severed then the spiritual well-being of the affected First Nation is at stake.

Just as all First Nations are not one homogeneous group, the land is not spiritually homogeneous. Certain areas are considered [sacred sites](#), therefore, are of significantly higher spirituality and are fundamental to the survival of First Nation culture. So, whatever undermines the sanctity of a sacred site undermines the culture of the First Nation. Access to the land and participation in land use decision-making processes to protect their spirituality, cultural practices, and traditions has been a key concern for First Nations since European contact.



In a Western worldview, land has value when

1. it has a desired location for living such as a view, proximity to schools and commodities
2. it has potential for resource extraction
3. it has a potential for business

Understand Housing on Reserve

Off reserve, a person can buy a home and the land the home sits on (but not the subsurface land, which is owned by the Crown).

On reserve land under the Indian Act, the land itself is owned by the Crown. Home ownership (purchase or rent) is managed by the First Nation governance which is different from nation to nation but limited by the Indian Act. Various First Nations are in committee to renew treaties and get out from under the Indian Act.

Currently there is a growing housing shortage and housing inadequacy – bringing with it poor health and curtailed opportunities - experienced acutely by Indigenous communities.

Call to Action #18: We call upon the federal, provincial, territorial, and Aboriginal governments to acknowledge that the current state of Aboriginal health in Canada is a direct result of previous Canadian government policies, including residential schools, and to recognize and implement the health-care rights of Aboriginal people as identified in international law, constitutional law, and under the Treaties.

Indigenous Communities and Housing Shortage: <https://www.indigenouwatchdog.org/subcategory/housing/>

(Auditor General Karen Hogan) “Indigenous Services Canada and the Canada Mortgage and Housing Corporation have been mandated to work with First Nations to meet their housing needs by 2030. We found that 80% of these needs were still not met with 7 years left before 2030,” Hogan said in a report issued Tuesday.

...Hogan found that people living on First Nations are “4 times more likely to live in crowded housing and 6 times more likely to live in housing in need of major repairs than non-Indigenous people, according to Canada’s 2021 Census.”

Implications

Read the article [Inadequate Housing and Crowded Living Conditions](#). List and describe three ways that inadequate housing negatively impacts Indigenous communities in Canada

1

2

3

Building Projects Led by Indigenous Community Leaders

Choose one of these recent articles on Indigenous led housing initiatives to learn about.

[Ugpi'ganjig, New Brunswick](#)



[Señákw, Vancouver](#)



[Port Alberni](#)



Which article did you read?

Which First Nation is the article about?

Either: Choose one sentence from the article (or the Nation's own website) that teaches you something about the First Nation. Copy the sentence. Explain what it teaches you.

Or: Summarize the article in your own words below.

Modern Treaties: The Te'mexw Treaty Process

Pronounce 'Te'mexw' as 'Tah-muck', with the 'ck' being alike to the 'ch' in 'loch'.

"Te'mexw" is a Hul'qumi'num word which means "land" in English.

"Te'mexw Treaty Association is a non-profit society formed by five Coast Salish Nations: Beecher Bay (SC'IA'NEW), Malahat, Snaw-naw-as, Songhees and T'Sou-ke. The five Te'mexw Member Nations came together to support one another in negotiating five Nation-specific Modern Treaties with the federal and provincial governments as part of the BC Treaty Process."

The Te'mexw Treaty process includes these First

Nations:

Beecher Bay (SC'IA'NEW) First Nation

The Malahat Nation

The Snaw-Naw-As Nation

The Songhees Nation

The T'Sou-ke Nation



"Our logo was designed and carved by the late Chief Rod Modeste from Malahat Nation.

The interlocking design of the salmon, land, moon, stars and water clearly shows that each part depends on the other; one part cannot flourish without the others.

Each symbol is deeply significant for Te'mexw Member Nations. We are stewards of the land, taking care of Mother Earth so that she will always be able to provide the riches that allow us to thrive. For this very reason, we have chosen the Hul'qumi'num word "Te'mexw," which means "land" in English.

The stars and the moon guide the salmon returning to the place of its birth. It splashes in the bay before travelling up the stream that flows from the land to the ocean. Thus, like all of Mother Nature's gifts, the salmon originates with the land.

These symbols are all significant to our people. Although our cultures are diverse, we share many stories passed on through generations of oral communication."

"Te'mexw Treaty Association negotiates self-government rights for each of the member Nations. Modern Treaties would give Nations the ability to get out from under regulation imposed by the Indian Act. Gaining recognition of the inherent right to self-government and self-determination means that Te'mexw Member Nations may manage their own communities and freely determine their own political, economic, social and cultural development in accordance with their values."

Lesson 7: Understanding a Mortgage

A home is one of the few things a person can buy that will generally hold its value or appreciate over time. Most people need to finance (to borrow money) their home. A loan specifically for the purchase of a house is called a mortgage.

Example 1:



\$799,900

Ophelia buys a home for \$800,000. Ophelia has quite a lot of money. She has \$800,000 in her bank account. She pays \$800,000 and moves into her nice new home.

Jeremy buys a home for \$800,000. Jeremy has a steady income, enough savings for a downpayment and a good credit score. He borrows from a lender who charges 4% apr. Here is the summary of the 'amortization':

Loan Summary and Amortization		Print	Email
Loan Amount:	800,000.00	Monthly Payment:	4,222.69
Interest Rate (%):	4	Total Payment:	1,266,807.00
Loan Term:	25 years 0 months	Total Interest:	466,807.00

How much more does Jeremy pay than Ophelia for his home?

How much does Jeremy need to pay for property transfer tax, legal and other fees (estimate \$3000) and a 15% downpayment?

While a mortgage is a long term plan (25 – 40 years), each mortgage agreement lasts for a shorter term (3 to 5 years). At each mortgage agreement renewal a person can choose:

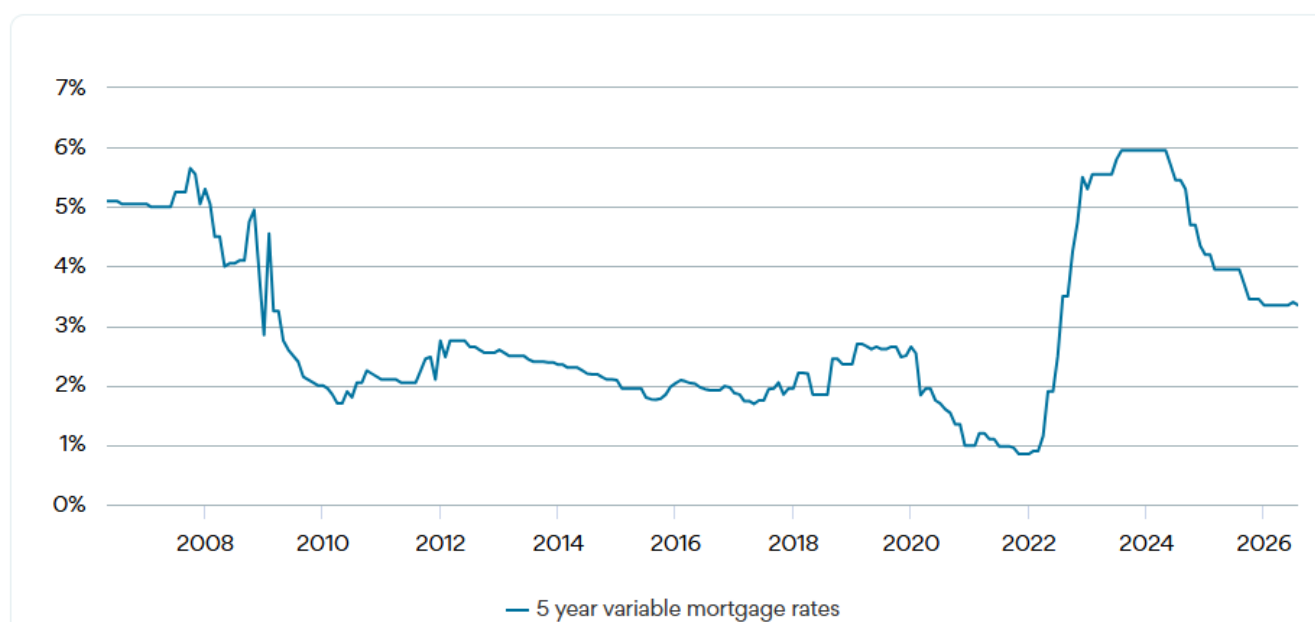
- To borrow from a different financial institution (move their mortgage);
- To reset the number of years left to pay the mortgage;
- To choose a fixed rate or a variable rate mortgage.
- To choose a mortgage that allows extra payments to reduce interest costs.

A **fixed rate** mortgage means that all your payments will be the same for the length of the agreement (about 5 years).

A **variable rate** is usually cheaper than a fixed rate because some risk of increased interest (interest set by the Bank of Canada) is transferred to the customer. The amount the customer pays each month might be lower or higher than the fixed rate. Anyone with a variable rate mortgage in 2022-2025 ended up paying a lot more than mortgage holders who purchased a 5 year fixed rate in 2021:

5-year discounted variable mortgage rates.

From 2006 - Today



<https://www.ratehub.ca/mortgage-rate-history-canada>

Trevor and Tom

Trevor and Tom are buying an apartment in a nice neighbourhood.



\$649,000

107 3564B Ryder Hesjedal Way

They have a downpayment saved up. They need to borrow \$550,000 to buy this apartment.

They choose a fixed rate mortgage at 4.2% APR for 25 years.

Use the [fncalculator.com](https://www.fncalculator.com) loan calculator to see the amortization of this loan.

- 1 How many months are in 25 years?
 - 2 How much is the monthly payment Trevor and Tom need to make?
 - 3 How much does the loan balance decrease by after the first month?
 - 4 How much (\$) of the first payment is interest?
 - 5 How much (%) of the first payment is interest?
 - 6 How many years and months pass by before the 'principle' portion of their mortgage payment is higher than the 'interest' portion?
 - 7 If Trevor and Tom keep the same agreement for 25 years, how much interest will they pay in total?
- Plot twist.
Trevor and Tom decide that they can pay an extra \$200 on their mortgage every month. Recalculate the amortization and include the \$200 extra payment.
8. How much is their monthly payment now?
 9. How long does it take to repay the whole mortgage?
 10. If Trevor and Tom keep the same agreement with an extra payment of \$200 per month for 25 years, how much interest will they pay in total?
 11. How much less is your answer for q10 than your answer for question 7?

Michael and Mariam

Michael and Mariam have always wanted an ocean front property.

Go to realtor.ca and find them a nice ocean front property.

Describe/draw the property here, include a few details such as location, number of bedrooms, asking price.

They have agreed to a 3.8% APR mortgage and they have decided to make a 20% downpayment.

Calculate the loan amortization on fncalculator.com for a 20 year mortgage.

- 1 How many months are in 20 years?
- 2 How much is the monthly payment Michael and Mariam need to make?
- 3 How much does the loan balance decrease by after the first month?
- 4 How much (\$) of the first payment is interest?
- 5 How much (%) of the first payment is interest?
- 6 How many years and months pass by before the 'principle' portion of their mortgage payment is higher than the 'interest' portion?
- 7 If Michael and Mariam keep the same agreement for 20 years, how much interest will they pay in total?
- Plot twist.
Mariam will retire in 15 years and they want to pay off their mortgage at that time.
8. Recalculate their mortgage with a 15 year amortization. How much is their new monthly payment?
9. How much more is their new monthly payment?
10. Recalculate their mortgage with a 20 year amortization and use your answer in question 9 as an 'extra payment'. Are there any differences to notice?

- What would you do? Tie yourself into an agreement with an increased monthly payment (agree to a 15 year mortgage), or keep the flexibility to stop making extra payments if you want to? Explain your decision.
- 11.

Alyx and Allyson

Alyx and Allyson are friends of yours and you are discussing mortgage rates (APR). Find today's mortgage rates from two different finance institutions (perhaps choose your own bank for one of them).

Institution	5 year fixed	5 year variable

They choose a fixed mortgage as Alyx is employed part time and Allyson is thinking of a career change in the next few years.

Alyx and Allyson have \$100,000 saved as a downpayment and they want to live in Vancouver within 10 km of UBC. Together they can afford to pay \$3000 per month on a mortgage. They are not planning on having kids in the next five years.

Go to realtor.ca and find them a place they can afford to buy that meets their criteria.

Describe/draw the property here, include a few details such as location, number of bedrooms, asking price.

Based on the price of the property (less the \$100,000 downpayment) and an interest rate you found, calculate the amortization of mortgage on the property. 25 years is ordinary, but they might need longer.

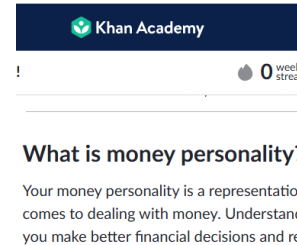
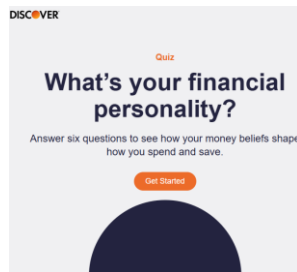
- 1 How much is the monthly payment Alyx and Allyson need to make?
- 2 How much does the loan balance decrease by after the first month?
- 3 How much (\$) of the first payment is interest?
- 4 How much (%) of the first payment is interest?
- 5 How many years and months pass by before the 'principle' portion of their mortgage payment is higher than the 'interest' portion?
- 6 If Alyx and Allyson keep the same agreement for the amortization period (usually 25 years), how much interest will they pay in total?
- 7 What is the balance after 5 years of paying this mortgage?
Plot twist. At 5 years they remortgage. They decide to reset the length of their mortgage to the original number of years.
- 8 Assume the same interest rate. Calculate their new monthly payment.
- 9 What could be an advantage of this decision?
- 10 What could be a disadvantage to this decision?
- 11 What would you do? Reset the length of the mortgage to 25 or keep it at a 20 year mortgage?

Lesson 8: Money Personality. Credit Scores and Types of Loans

Money Personality

What kind of money decisions are you familiar and comfortable with? The decisions we make regarding money are shaped by our experiences, culture and people around us. However as with any traits of personality, any two people can make very different decisions.

Explore one or more of these online quizzes to learn more about how you make decisions.



At the end of the quiz, you are generally given some adjectives and some descriptors. What descriptors did the quiz give you? Do you agree?

Life experience and circumstances can persuade us or force us to make decisions that we might not foresee.

It's important to understand that each person comes to finance decisions with different values and that these values change over time.

Credit Scores (source: <https://www.canada.ca/en/financial-consumer-agency/services/credit-reports-score/improve-credit-score.html>)

To borrow money you need to have a good credit score. A good credit score means that you have a history of paying back money that you have borrowed in a timely and reliable way.

You need to have had a loan of some kind to get a good credit score.

Read the information around the walls of the classroom about how to get and keep a good credit score, then answer these questions:

1. How old do you need to be in BC to have a credit card in your own name? (How old do you need to be in your home country to have a credit card in your own name?)
2. If your credit card has a limit of \$12000, what spending limit should you set yourself?
3. If you spend \$2300 on a laptop, should you (choose one):
 - (a) wait until the end of the month to pay it off?
 - (b) plan to pay it off before the end of the month before you buy it?
 - (c) forget about it and enjoy your shiny new laptop?
4. According to the advice around the classroom, what is the most important thing to do to keep a good credit score?
5. To get a good credit score should you (choose all that apply)
 - (a) Use your credit card often
 - (b) Use a small amount and pay it back quickly
 - (c) Use a large amount and pay it off at the end of the month?
 - (d) Use as much as possible as often as possible to get as many rewards as possible
 - (e) Don't pay it off so that your credit card company knows how much you appreciate them.
6. If you change your bank and no longer use a credit card, according to this advice should you
 - (a) close the account
 - (b) keep it open

What would you do?

7. A person has a better credit score if they apply for credit regularly. True or False?
8. A person has a better credit score if they apply for a variety of loans. True or False?
9. What is meant by 'minimum payment'?
10. Make up and describe an example of a good use of a credit card.
11. Make up and describe an example of an unwise use of a credit card.
12. Your credit card company is legally obliged to tell you when you have \$100 or less available credit, except in what circumstances?

Research one of these types of loan:

Who can apply, what kind of interest rate to expect, how much can you borrow?

Secured loan	
Unsecured loan	
Student loan	
Auto loan	
Personal loan	
Line of Credit	
Pay day Loan	
Credit Card	

Lesson 9: Calculating The cost of Loans

The cost of a loan is the interest you pay in the process of paying off the loan.

The most expensive loans are pay day loans (300 – 500% APR).

Next on the list of most expensive are credit cards. Credit cards charge anywhere from 12%APR to 25%APR.

Cash Back Mastercard®

Earn Rewards, No Annual Fee.

20.99 %
Purchases

22.99 %
Cash Advances

For example, suppose we have \$4000 **debt** on a credit card with a 20.99% interest rate for five years. Let's assume that the interest is calculated daily.

$$FV = PV \left(1 + \frac{r}{n}\right)^{r \times n} = 4000 \left(1 + \frac{0.2099}{365}\right)^{5 \times 365} =$$

$$\text{Interest} = FV - PV =$$

The cost of a loan can be decreased in these ways:

Watch:



Debt Calculations. Examples

1

Credit Card

- Credit Card Payoff Calculator
- Credit Card Minimum Calculator

Use the credit card minimum calculator.

Rual buys a laptop for \$1500 on his credit card. His credit card has an interest rate of 19.5% compounded daily. His minimum payment is calculated as 5% of the balance or \$20, whichever is higher.

- (a) how long will it take to pay off the laptop?
- (b) how much interest will Rual pay in this time?

Rual paid attention in his FOM12 math class and he decides to pay \$75 every month.

Now use the TVM calculator, click 'advanced'.

- (c) how long does it take for Rual to pay off the cost of the laptop?
- (d) how much interest will Rual save by making a regular payment rather than the minimum payment?

2

Joanne buys a boat. She borrows \$4050 and plans to pay it off in 4 months.

She can borrow the money on her line of credit which charges 10.4% interest compounded monthly, or, she can use her new credit card which will give her a \$100 rebate on its first use and an interest rate of 13.7% compounded daily.

Use the TVM advanced calculator.

- (a) How much would her monthly payments on the line of credit be?
 - (b) How much would she pay in total after four months?
 - (c) What is the interest?
 - (d) How much would her monthly payments on her credit card be, after the \$100 rebate?
 - (e) How much would she pay in total after four months?
 - (f) What is her resulting interest?
 - (g) What would you do and why?
-

3 Use the TVM calculator.

Trish has a secured line of credit that charges 2% above the bank of Canada rate compounded monthly. The Bank of Canada rate is currently 2.25%

She pays \$3500 for landscaping costs using her line of credit.

She can afford \$400 per month.

(a) How long will it take Trish to pay off this loan?

After two months, the Bank of Canada rate is increased to 4.5%.

(b) Reassess how long it will take Trish to pay off this loan.

(c) What is the total interest Trish pays over the course of the loan?

4 Use the compound interest formula or the TVM calculator.

Marla owes \$11500 on her credit card. She had a plan to pay it off but she is not able to do so right now. Her credit card charges 21% interest compounded daily. How much does she owe in interest each month?

5 Use an ordinary calculator.

Travis has to pay his rent but his paycheck won't come in for two weeks. He needs to borrow \$500 from a pay-day loan company. They charge \$14 for every \$100 borrowed. He has two weeks to pay it back.

(a) How much does Travis need to pay back when he gets his paycheck?

(b) \$14 for every \$100 is 14%, but this is just 2 weeks. What is the APR for this interest?

6 Thomas has two credit cards and a line of credit. He owes \$3500 on credit card A that charges 15.7% APR, compounded daily. He owes \$5100 on credit card B that charges 19.99% APR, compounded daily. He has \$6000 on his credit line that charges 6.5% APR, compounded monthly. Thomas is making a plan to be debt free in two years.

(a) Calculate the combined monthly payment and the total interest he pays if he keeps his debt in these three different accounts.

(b) Calculate the monthly payment and the total interest he pays if he consolidates all his debt to the credit line.

Debt Calculations

- 7 Use the compound interest formula.

Alex borrowed \$2500 to help pay for his summer school tuition. He will pay it back in full after two years. His bank gave him a personal loan with a 6% APR, compounded monthly.

- (a) How much will Alex owe after two years?
(b) How much interest does he pay?
-

- 8 Use the compound interest formula.

Lissa laid new floors in her house 18 months ago. She used her home equity line of credit which charges 6.5% interest compounded weekly. Her account balance is \$9,645.51. How much money did she borrow?

- 9 Use the TVM calculator, advanced

Vikky has opened a new business. Her bank gave her a small business loan of \$15000, with an interest rate of 2.6% compounded semi-annually. She will make regular payments of \$2400 quarterly.

- (a) How long will it take Vikky to pay the bank loan?
(b) How much will she pay in interest?
-

- 10 Bernice has a \$30000 loan at 6.4%, compounded monthly, for 5 years.

Use the compound interest formula

- (a) If she pays off the loan in one payment at the end of 5 years, how much interest will she need to pay?

Use the TVM calculator

- (b) If she makes regular payments to pay off the loan in 5 years, how much interest will she need to pay?
-

- 11 Jose is buying a car and needs to borrow \$14000. He plans to pay it off using monthly payments.

He is deciding between a 3 year loan and a 5 year loan with the same APR. Explain the advantage of each loan. Use calculations to inform your explanation.

Lesson 10: Investing

Saving money can be as simple as through a regular savings account with your bank or as complex as investing in the stock market and many other options in between.

Here are four questions to answer when considering savings: (Goals, Access, Risk, Management)

1.

2.

3.

4.

Watch: <https://www.youtube.com/watch?v=rhG5HVbxsFY>

Research one of these types of investments. Create a slide on our collaborative slide set and be prepared to present on it. Explain what your investment type is, who it is for and find some examples online. Refer to questions 2, 3 and 4 above in your research.

Saving account through your regular bank
GIC
Government Bonds
Registered accounts such as: RESP, RRSP, FHSA
TFSA
Stock Market
ETF or Mutual Funds
Real Estate
Gold

Lesson 11: \$10000 until December

Investing in the stock market carries some risk. Before you invest in the stock market

1. You have no high interest debt.
2. You have money you can put away for several years without needing to access it.
3. You have three months financial security (cost of living for three months) set aside.
4. You know your answers to the 'goals, access, risk and management' questions above.

Let's invest \$10,000 each until January.

Watch: https://www.youtube.com/watch?v=O09_q306-Tg

Investing in Canadian Companies

Starting balance: 10000

[illegible]

Lesson 12: Investment Portfolio Calculations

Rate of Return

Rate of return is the amount of interest earned as a percentage of the total paid into an account.

EXAMPLE:

\$4000 is put into a savings account for 5 years offering 4.5% APR compounded monthly. Calculate the rate of return.

SOLUTION:

First, calculate the future value.

$$FV = PV \left(1 + \frac{r}{n}\right)^{n \times t} = 4000 \left(1 + \frac{0.045}{12}\right)^{12 \times 5} =$$

Next, calculate the interest.

$$\text{Interest} = FV - PV =$$

Finally, calculate the Rate of Return, RoR

$$\text{RoR} = \frac{\text{Interest}}{PV} \times 100 =$$

Doubling Time

'Doubling time' is the number of years it takes for money to double.

Eg

\$4000 is put into a savings account for 5 years offering 4.5% APR compounded monthly. How many years will it take for the value of the account to equal or exceed \$8000?

SOLUTION: Solve for t , the number of years.

$$8000 = 4000 \left(1 + \frac{0.045}{12}\right)^{12 \times t}$$

??

We could use a 'doubling time' calculator to solve this equation or take Precalc12 to learn how to solve it ourselves. However, we have a 'doubling time' estimation which is very easy.

$$\text{Doubling time} \approx 72 \div \text{APR}$$

In this case, doubling time $\approx 72 \div 4.5 = 16$. It will take approximately 16 years to double this investment.

Check:

$$8000 = 4000 \left(1 + \frac{0.045}{12}\right)^{12 \times 16} = \$8206.67$$

A. Calculate doubling time

According to the rule of 72, how many years does it take to double an investment that earns:

-
1. 1% APR

 2. 3% APR

 3. 10% APR

 4. 15% APR

B. Calculate the Rate of Return on these investments:

-
1. \$3500 is paid into a GIC for three years that earns 5.5%APR compounded monthly.
Calculate:
a) the future value,
b) the interest
c) the rate of return on this investment.

-
2. Jose pays an initial payment of \$1000 into a savings account then pays \$250 at the end of every month for three years.
The savings account earns 3.5% APR.

Calculate:
a) the total amount of money Jose puts into the account over the three years.
b) the total amount of money in the account at the end of the three years.
c) the interest earned by this investment.
d) the rate of return.
-

C. Saving for University

1. Isabella is 18 and about to start university.

When Isabella was 8 years old, her parents opened an RESP and deposited \$150 per month. At each deposit, the government also deposited 20% of her parent's deposit. The RESP earned an average of 6.5 % compounded monthly.

When she was born, her grandparents invested \$5000 in a trust account that earned an average of 7% APR compounded semi-annually.

- a) How much was paid into these accounts in total, including the government contribution to the RESP?
- b) How much was earned in interest by the trust account?
- c) What was the rate of return on the trust account?
- d) What is the total value of these investments to Isabella now?

Isabella is planning to spend 4 years at university. She withdraws \$15000 for her first year and puts the remainder into a one year GIC that earns 3.5% interest.

- e) What is the value of the GIC at the end of her first year at university?
 - f) If Isabella withdraws \$15000 each year and reinvests the remainder into one year GIC's, how much will she have for her fourth year at university?
-

D. Compare two portfolios

Both Alex and Jamie have an investment portfolio.

a) What is the current value of each portfolio?

b) Who has the greater rate of return? Show your calculations.

Alex's portfolio

- A 10-year \$5000 GIC, purchased 9 years ago, that earns 2.6% compounded annually.
- A 5-year \$2000 CSB, purchased 4 years ago, that earns 3.1%, compounded semi-annually.
- A savings account at 1.4%, compounded weekly, into which he has been making weekly deposits of \$15 for 5 years.

Jamie's portfolio

- A 10-year \$3000 bond, purchased 9 years ago, that earns simple interest at 2.7%
- A 3 year \$700 CSB, purchased 3 years ago, that earns 2.8% compounded semi-annually
- A high-interest savings account, at 1.7% compounded monthly, into which sh has been making monthly deposits of \$100 for 6 years.

a)

a)

b)

b)

Lesson 13: Review & Practice Test

Section A Using the Compound Interest Formula	Section B Types of Debt	Section C Types of Investment	Section D Using the TVM calculator	Section E Portfolio Comparison
E D P	E D P	E D P	E D P	E D P

REFERENCE PAGE

Rule of 72: Approximate number of years for money to double: $72 \div (\text{rate})$

Calculations with Compound Interest

1. To calculate future value FV

$$FV = PV \left(1 + \frac{r}{n}\right)^{n \times t}$$

2. To calculate present value PV (or, 'principle')

$$PV = FV \div \left(1 + \frac{r}{n}\right)^{n \times t}$$

3. To calculate Interest, I

$$I = FV - PV$$

4. To calculate rate of return, as a percentage

$$RoR = \frac{FV - PV}{PV} \times 100$$

The value n Compounding Interest periods:

Description	Value n
Annual	1
Semiannual	2
Quarterly	4
Monthly	12
Weekly	52
Daily	365

Section A

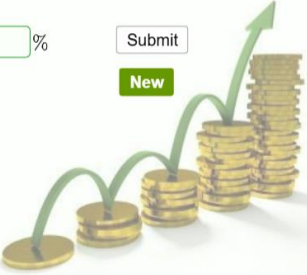
Practice questions on using the compound interest with this link. Your test will include six questions drawn from this question bank. <https://www.geogebra.org/m/scbnchs5>

Calculate the rate of return of an investment of \$7800 after 5 years at an interest rate of 1.7% p/a, compounded annually.

Round your answer to the nearest percent.

Rate of Return = %

☐ Answer



Section D

Practice questions on using the finance calculator with this link. Your test will include six questions drawn from this question bank and you will have access to [fncalculator.com](https://www.fncalculator.com)

Remember to enter money paid into the bank as negative.

Total paid by investor = present value + (periods x payments)

1. Calculate the future value of an investment whereby an initial deposit of \$1000 is followed by payments made quarterly of \$600 over 35 years. The interest rate is 3.5% p/a and is compounded quarterly.

Enter your answer correct to 2 decimal places.

Future value = \$

Question



Section B: Types of Debt

Here is a list of five ways to borrow money. List them in the table on the right from lowest interest rate to highest interest rate.

A	Pay day loan
B	Mortgage
C	Credit card
D	Personal loan
E	Auto loan

lowest interest rate:

highest interest rate:

In class we listed five ways the borrower can lower the cost of borrowing (the interest paid). Name two of them here.

In class we read several ways to get and maintain a good credit score. Explain two of them here.

1.

2.

Section C Types of Investment

Explain the word 'diversification' in terms of investment.

Explain the word 'risk' in terms of investments.

Rank these types of investments in terms of risk, from low or no risk to high risk.

A	Investing in a brand new company	lowest risk:	
B	Investing with a GIC		
C	Investing in gold		
D	Investing in government bonds		
E	Investing with an ETF or Mutual Fund	highest risk:	

Explain one of your rankings.

Choose one of the types of investments and explain what it is, how it works, what interest might be expected on a \$10,000 investment over a year and what the risk is of your money losing value.

Type of investment:

How it works:

What interest to expect on \$10,000 over one year

What is the risk that your money will lose value?

Section E: Consolidating debt or Comparing two portfolios

Trevor and Tom are having a wonderful time living in Colwood. Their first five-year term on their \$550,000 mortgage has ended. They did not miss any payments. They each have an excellent credit score and the apartment they bought for \$650,000 in September 2026 has increased in value to \$775,000. However, they have been finding it difficult to make ends meet and their debts are feeling like a problem. They are considering consolidating their debt onto a home equity line of credit (HELOC). They are considering PLAN A paying off each debt separately in the next two years or PLAN B consolidating their debt onto a home equity line of credit (HELOC) and paying it off in the next two years.

Trevor and Tom's debt:

- Credit card A. The current balance is \$13,000. The APR is 19%, compounded daily.
- Credit card B. The current balance is \$5000. The APR is 22% compounded daily.
- 3 year \$12,000 auto loan they started one year ago, with 7.5% APR, compounded monthly.

PLAN A Pay off each of the three loans in two years.

- a) Calculate the monthly payments on credit card A, to pay it off in two years.
- b) Calculate the interest that will be paid on credit card A over the two years.
- c) Calculate the monthly payments on credit card B, to pay it off in two years.
- d) Calculate the interest that will be paid on credit card B over the two years.
- e) Use the TVM loan calculator amortization to calculate the current balance on their auto loan.
- f) What are the monthly payments on the auto loan?
- g) Calculate the interest that will be paid on the auto loan over the next two years only.
- h) Calculate their total debt (credit card A + credit card B + current auto loan)
- i) Calculate the total monthly debt payments ($a + c + f$)
- j) Calculate the total interest paid on all three accounts over the next two years.

PLAN B

Trevor and Tom have paid the first five years of their \$550,000 mortgage on a 25 year amortization with 4.2% APR.

k) Use the TVM loan calculator amortization to calculate the balance on their mortgage at the end of 5 years (60 months).

l) Given that their home has been recently valued at \$775,000, how much equity* do they have in their home?

Due to their excellent credit score, they arrange a home equity line of credit (HELOC) for their total debt (part h) at 5.5% APR compounded monthly. They plan to pay it off in two years.

m) Calculate the monthly payments on their HELOC

Trevor and Tom need to decide on Plan A or Plan B.

n) Would you advise Plan A or Plan B?

Describe one benefit of the plan you advise they choose.

Describe one drawback of the plan you advise they choose.

*home equity is the portion of your home you own.

Home equity = (the current value of your home) – (the balance of your mortgage)

PROJECT

Appendix one – different file, landscape, graphs for lesson on wealth distribution in Canada.

Appendix 2: Credit scores. From <https://www.canada.ca/en/financial-consumer-agency/services/credit-reports-score/improve-credit-score.html>

Pay your bills on time

Your payment history shows how often you pay your bills on time. It's the most important part of your credit score.

To improve your payment history:

- always make your payments on time
- make at least the minimum payment if you can't pay the full amount
- contact the lender right away if you think you'll have trouble paying a bill
- don't skip a payment even if you're disputing a charge

A strong payment history tells lenders that you repay money reliably.

Get electronic alerts

Your financial institution may alert you when:

- your available credit falls below a set amount
- a payment is due

These alerts may help you keep track of your spending and avoid missed payments.

Your bank is required to tell you by text/email/notification when your balance falls below \$100; or your credit card has less than \$100 available. You won't receive this notification if your contact details are incorrect. Also, you can request (in writing) your bank to not send this notification or change the amount for which you receive the alert.

Use your credit wisely

Your **credit utilization rate**, also called your **credit use**, shows how much credit you use compared to your credit limit.

Tip

Try to use **less than 30%** of your total credit limit. For example, suppose your credit card has a \$5,000 limit and you normally use \$1,000. Your credit utilization rate is at 20%.

To manage your credit utilization rate effectively:

- don't go over your credit limit
- aim to have a higher credit limit and use only a small portion of it
- keep your monthly credit utilization rate low, even if you pay the full balance

Lenders look at your credit utilization rate to judge how you manage your available credit. If you regularly use a lot of your available credit, they may see you as a higher risk. This may happen even when you pay off your debts in full every month. Low credit use shows lenders that you don't rely too heavily on borrowed money.

Improve your credit history

In BC, you need to be 19 years old (age of majority) to have a credit card in your own name. Your credit history includes how long you've had credit accounts and if you keep them active. Lenders want to see a long and stable credit history. Keeping your accounts open and active for a long time may help improve your credit score.

Example

If you open a new credit card to transfer a balance, it counts as a new account. This may reduce the average age of your accounts and lower your credit score. If you close the old account, it may hurt your credit score even more.

Closing an older account makes you:

- lose older credit history
- reduce your available credit

Keeping the old account open, even with a zero balance, helps you:

- maintain your credit history
- improve your credit utilization rate

Consider keeping an account open if:

- it doesn't have annual fees
- it's easy for you to manage
- you can use it occasionally to keep it active

Limit how often you apply for credit

Credit inquiries, also called **credit checks**, affect your credit score. When a lender checks your credit report, the credit bureau records the inquiry. They include it on your credit report.

It's normal to apply for credit occasionally. However, too many credit inquiries made too close together may make lenders think that you're:

- urgently seeking credit
- spending beyond your means

To limit credit inquiries:

- only apply for credit when you need it
- avoid sending multiple applications at once or too close together
- when shopping for a car loan or mortgage, get quotes from different lenders within a 2-week period. Credit bureaus treat these as 1 inquiry

Use different types of credit carefully

Your credit history includes the different types of credit you use. You may have a lower credit score if you only have 1 type of credit product.

It's better to have different types of credit, such as:

- a credit card
- a car loan
- a line of credit

Tip

Lenders want to see that you can manage more than 1 type of credit responsibly. **Only borrow money you're able to pay back.** Taking on too much debt may harm your credit score.