

**Curriculum Resource**

Apprenticeship Answers: By The Numbers

**OALCF Alignment**

Competency	Task Group	Level
Competency A - Find and Use Information	A1. Read continuous text	1
Competency A - Find and Use Information	A2. Interpret documents	2
Competency B - Communicate Ideas and Information	B1. Interact with others	2
Competency B - Communicate Ideas and Information	B3. Complete and create documents	2
Competency C - Understand and Use Numbers	A1. Read continuous text	1
Competency C - Understand and Use Numbers	A1. Read continuous text	2
Competency C - Understand and Use Numbers	C2. Manage time	1
Competency D - Use Digital Technology	N/A	1
Competency E - Manage Learning	N/A	2

**Goal Paths (check all that apply)**

- Employment
- Apprenticeship
- Secondary School Credit
- Postsecondary
- Independence

**Embedded Skills for Success (check all that apply)**

- Adaptability
- Collaboration
- Communication
- Creativity and innovation
- Digital
- Numeracy
- Problem Solving
- Reading
- Writing

**Notes:**

**Original source material:** Apprenticeship Answers Curriculum

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**CLO Researcher / Writer:** Summer Burton

**Note:** Originally one large resource with three units, based on recommendations from our expert advisors, it has been divided into several separate resources:

1. Apprenticeship Answers: Exploring Apprenticeship
2. Apprenticeship Answers: How do I Become an Apprentice?
3. Apprenticeship Answers: Skills for Apprenticeship Success
4. Apprenticeship Answers: By the Numbers
5. Apprenticeship Answers: Working as an Apprentice
6. Apprenticeship Answers: Putting Your Best Foot Forward

This is the fourth resource, Apprenticeship Answers: By the Numbers

# Apprenticeship Answers: By the Numbers

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## Budgeting Basics

One of the great things about apprenticeship is that you can start earning money from your very first day of training. This is exciting and allows you to pay for necessary expenses. It may also allow you to save for big purchases and have a little fun.

When making money, it's important to look at how much you are earning compared to how much you are spending. That helps you make decisions about where your money goes. It's budgeting, and it's a necessary skill to learn. Many people do not know how to budget. If you haven't had a pay cheque for a while, or if how much you earn will be changing as you begin your apprenticeship, it is a good idea to plan for where your money will go.

There are two key parts to a budget. The first is **income**. This is the amount of money you have to spend. You may have more than one type of income. Along with a job, some people sell items on Kijiji, receive a government benefit, or have a small side business. Anything that brings in money should be included in the income part of your budget.

The second part of the budget is **expenses**. These are the bills you have to pay. They may be payments that are the same amount of money each month like rent or a car payment. These are called fixed expenses. Other expenses may not be the same each month like grocery bills or clothing costs. These are called variable expenses. It is important to include a list of all expenses on your budget.

An example of a simple monthly budget is shown below and on the next page.

Monthly Income	Amount
My salary	
My partner's salary	
Other income	
<b>Total</b>	

Monthly Expenses	Amount
Mortgage/Rent	
Property taxes	
Groceries	
Car loan	
Gas	
Phone	
Internet	
Utilities (electricity, water, heat)	
Credit card payments	
Clothing	
Laundry	
Childcare	
Medical/Dental	
Household repairs	
Savings	
Other	
<b>Total</b>	

Once you know the total of your income and the total of your monthly expenses, you can compare them.

Monthly Income	Monthly Expenses	Difference

Your expenses should be the same or less than your income, and never more than your income. To save money for things like a larger purchase, an emergency, or to cover your expenses when you're doing the in-school portion of your apprenticeship training, you want your expenses to be less than your monthly income.

### Activity – Comparing Monthly Income and Expenses

Below is an example of a completed budget. Add up the income and expenses, and find out whether the expenses are more than, the same as, or less than the income. You can use a calculator if you want.

Monthly Income	Amount
My salary	\$1,900
My partner’s salary	\$2,700
Other – Child Benefit	\$200
<b>Total</b>	

Monthly Expenses	Amount
Mortgage/Rent	\$1,700
Groceries	\$800
Car loan	\$300
Gas	\$120
Phone	\$40
Internet	\$50
Utilities (electricity, water)	\$100
Credit card payments	\$120
Clothing	\$50
Laundry	\$25
Childcare	\$800
Medical/Dental	\$75
Household repairs	\$30
Savings	\$250
<b>Total</b>	

Monthly Income	Monthly Expenses	Difference

Which is higher, the income, or the expenses?

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What is good about this budget?

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Can you think of any changes to make this budget work better?

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What other items might be on an income list?

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What other items might be on an expense list?

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Why do you think budgeting is important?

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## Raise the Roof (on your wages!)

You already know that one benefit of training as an apprentice is that you get paid while you learn. Your wage will not be as high as someone who has completed their apprenticeship though.

Usually Level 1 apprentices earn about half of what a fully certified journeyperson makes. You will not make lower than minimum wage. The good news is that your wage will usually increase each time you advance to the next level of your apprenticeship.

How much of a wage increase you may get depends on the skilled trade you are apprenticing in, and how many levels of training you need to complete. Some employers and unions make it clear exactly when apprentices will see increases to their pay cheque and what those increases will be. Smaller businesses may not offer the same information. It is important to ask your employer what they expect you to do before increasing your wage, and how long that might take.

An apprentice should never take a raise for granted, even if it's expected as you progress through levels of your apprenticeship. It is important that you go to work every day and give the best you can to your work. Not only will you show your employer you deserve more money, you will also be more likely to receive promotions and stay with that employer after your apprenticeship is completed.



### Activity – Wage Increases

Examples of starting wages for three apprentices are listed below. For the first part of this exercise, assume that each of these apprentices will receive a 10% wage increase once they have successfully completed their Level 1 in-school training.

To find the apprentice’s new wage, multiply their starting wage by 1.10. This calculation adds 10% to whatever number you’re multiplying. For example:

$$\$10.00 \times 1.10 = \$11.00$$

Then subtract the wage the apprentices was earning at Level 1 from the new wage they will earn at Level 2. This will tell you how much more they are making each hour. For example:

$$\$11.00 - \$10.00 = \$1.00$$

You can use a calculator if you want.

	Hourly wage for a Level 1 Apprentice	New hourly wage as a Level 2 Apprentice	How much more are they making?
Electrician Apprentice	\$18.00 / hour		
Hairstylist Apprentice	\$16.00 / hour		
Cook Apprentice	\$15.50 / hour		

For the second part of this exercise, assume that each of these apprentices will receive a 15% wage increase once they have successfully completed their Level 2 in-school training.

To find the apprentice’s new wage, multiply their starting wage by 1.15. This calculation adds 15% to whatever number you’re multiplying. For example:

$$\$11.00 \times 1.15 = \$12.65$$

Then subtract the wage the apprentices was earning at Level 2 from the new wage they will earn at Level 3. This will tell you how much more they are making each hour. For example:

$$\$12.65 - \$11.00 = \$1.65$$

You can use a calculator if you want.

	Hourly wage for a Level 2 Apprentice	New hourly wage as a Level 3 Apprentice	How much more are they making?
Masonry Apprentice	\$22.00 / hour		
Welding Apprentice	\$24.50 / hour		
Carpentry Apprentice	\$21.00 / hour		

## Grants, Loans and Incentives

The money you earn during your on-the-job apprenticeship training can be used to pay for things like rent, food, transportation and your other expenses. You may have to pay extra money for tools or to travel for your in-school training. While you can apply for Employment Insurance (EI) when you are off work to attend your in-school training, you will probably not be paid by your employer during that time. The good news for apprentices is that there are grants, loans and incentives available to help.

It is important to understand the difference between a grant and a loan.

- Grants are money that will **not need** to be paid back.
- Loans are money that will **need** to be paid back.

The Ontario government and the Canadian government both provide grants and loans to apprentices. During your time working and studying, you can get money:

- to help you buy tools you need for your trade
- once you complete your apprenticeship and receive your certificate
- if you are studying full-time
- if you have a disability

### Activity – Finding Financial Support

Visit the Government of Ontario’s **Financial Supports for Apprentices** website using the link below. Answer the following questions about grants, loans and incentives.

<https://www.ontario.ca/page/financial-supports-apprentices>

1. Do you need to pay back money that’s available to help apprentices pay for tools and equipment for your trade?

Yes       No

2. The amount of money you can get for tools and equipment depends on the type of trade you’re apprenticing in. What are the grant amounts for the following sectors?

Motive power trades: \$ \_\_\_\_\_

Construction trades: \$ \_\_\_\_\_

Industrial trades: \$ \_\_\_\_\_

Service trades: \$ \_\_\_\_\_

3. What are three costs that the **Apprentice Development Benefit** can cover for apprentices attending full-time, in-school training?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

4. Apprentices with disabilities can receive funding for individualized services and access to tools and technologies such as:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

5. The **Apprenticeship Incentive Grant** is a taxable cash grant of \$\_\_\_\_\_ per year, up to a maximum of \$\_\_\_\_\_ per person, for those who are out of high school and training in a Red Seal trade.

6. The **Apprenticeship Completion Grant** is a one-time \$\_\_\_\_\_ taxable cash grant available to those who are out of high school and training in a Red Seal trade.

7. Apprentices training in a Red Seal trade can also apply for up to \$\_\_\_\_\_ in interest-free loans through the Canada Apprentice Loan program.

8. The **Apprenticeship Completion Bonus** is a \$\_\_\_\_\_ taxable cash grant available to those who are out of high school and have completed their training in a non-Red Seal trade.

The kinds of grants, loans and incentives available to apprentices change over time. Be sure to visit the Government of Ontario's **Financial Supports for Apprentices** website regularly to look for new incentives, or changes to the grants and loans you looked at today.

### Activity – Helping others understand financial support

You have learned a lot about different grants and loans available to apprentices. Create a presentation for someone else interested in becoming an apprentice that explains:

- the difference between a loan and a grant
- two different loans or grants an apprentice can apply for
- how much money you can get
- what you need to qualify or be eligible for this money
- how and when to apply for this money

Your presentation can be given aloud using a handout (handwritten or printed from a computer) or a PowerPoint slideshow. Give your presentation to a tutor, instructor or classmate, family member or friend.

## Logging Hours

To become a fully licensed trades person, you need to complete a specific number of hours both in on-the-job training, and in class. Here are some examples of the number of required hours for several different skilled trades.

Skilled Trade	Length of training	On-the-job training	In-class training
Residential Air Conditioning Systems Mechanic	4,500 hours (approximately two and a half years)	4,020 hours	480 hours
Motorcycle Technician	6,000 hours (approximately three and a half years)	5,520 hours	480 hours
Horticultural Technician	6,120 hours (approximately three and a half years)	5,400 hours	720 hours
Plumber	9,000 hours (approximately five years)	8,280 hours	720 hours

Your required number of on-the-job training hours are intended to make sure that you have a lot of time to learn from professional trades people before working on your own. These hours are logged by your employer because they need to report them to the Ministry of Labour, Immigration, Training and Skill Development.

You may or may not have logged hours at a job in the past. An employer may have done it for you, or it may not have been required. As an apprentice, you should keep a record of the hours you've worked. That way:

- you know how many hours you have completed
- you know how many hours you have left to complete
- you have a record in case you ever need to prove you worked your hours
- you will know if there are any errors with your sponsor's records, or if those records get lost, you have a copy.

## How to keep a record of your hours worked

Logging hours doesn't have to take a long time. Taking a few minutes to do it at the end of the day can become an easy routine.

You can record your hours by:

- keeping a copy of your pay stubs
- keeping a copy of your daily or weekly timesheet (if you have one)
- getting a log book to record them in
- writing them in a notebook
- creating a note on your phone you can add to each time you work
- creating an Excel spreadsheet to record them
- use an app that tracks hours

It is important to keep all your records in one place. Scribbling notes all over the house will not help you if you need to show the total hours you have worked. Post-it notes can easily be lost!

Some people love to keep detailed records. Others just want the basics. The date and hours worked are the most important pieces to include in your log. Extra details can be helpful if you need to remember other information. These may include your location of work if it changes, supervisor or other staff who were with you, and the type of work you were doing.

As an apprentice, you will keep a record of all of the skills you are learning in a logbook that you and your employer sign. Getting used to keeping records now will help prepare you for this.

**Discussion:**

Have you ever tracked your work hours before? When? What are the benefits?

What types of details might you keep in your log?



**Activity – Keeping a Record**

Here are two different examples of apprentices that are keeping a record of their hours worked. Read their stories and fill in the blanks in their logs.

1. A Hairstylist apprentice is working all of their hours under the senior styling team at a busy salon. They worked five hours on Monday, Wednesday and Friday assisting the stylists with shampooing, haircuts and styling. On Tuesday and Saturday, they helped stylists with colour treatments for eight hours each day.

Fill in the missing parts of their work record.

Date	Hours Worked	Details
Monday March 3	5	Assisted with shampooing, haircuts and styling
	8	
		Assisted with colour treatments
Sunday March 9	0	
Total Hours		

2. A Construction and Maintenance Electrician apprentice is working for a large company with many contracts and dozens of employees. They are learning about electrical systems in residential, commercial, institutional and industrial settings. On Monday and Wednesday, they worked with Team A on commercial jobs for 10 hours each day. On Tuesday and Thursday they worked with Team B on a residential job for nine hours each day. On Fridays, they were back working with Team A on an industrial job for eight hours. This week, they picked up a 5-hour overtime shift on Sunday supporting Team C who was called in for an emergency institutional job.

Fill in the missing parts of their work record.

Date	Type of work	Team	Hours worked
Monday March 3			10
	Residential		
		Team A	
			9
	Industrial		
Sunday March 9			
		Total Hours	

**Discussion:**

Which of these two logs did you like working with better? Why?

How do you think you'll record your apprenticeship hours?

## Why Math Matters in Apprenticeship

Numeracy refers to how comfortable you feel working with numbers and math. Did you know that numeracy is one of the Government of Canada's Skills for Success? Those are the skills that everyone needs to be successful at work, in learning, and in life. Working in the trades requires strong numeracy skills. You will need to be comfortable with:

### Measurement and calculation

These are the skills you need to measure things in the physical world. This can include taking measurements and calculating area and volume.

### Money math

These are the skills you need to understand elements of paying and receiving money on the job. This can include handling cash, making change, preparing bills or making payments.

### Scheduling, budgeting and accounting

These are the skills you need to manage time and money. This can include planning and keeping track of how you use your time and money, and choosing the products or services that offer the best value.

### Data analysis

These are the skills you need to solve problems by understanding and comparing information that is tracked using numbers.

On the Government of Canada's Skills for Success website, you can use the [Trades Math Workbook](#) to learn more about the numeracy skills required to work in the trades. This workbook can help you:

- discover how journeypersons use numeracy on the job
- practice your numeracy skills
- find out which numeracy skills you may need to improve

The workbook is divided into four sections, each of which highlights different numeracy skills that journeypersons use on the job. Did you know that the skilled trades require all or most of the math skills listed below?

- Reading, writing, counting, rounding off, adding, subtracting, multiplying and dividing whole numbers, fractions and decimals
- Converting between fractions, decimals and percentages
- Understanding square roots, powers and other scientific notations
- Using equations and formulas to solve problems
- Comparing rates, ratios and proportions
- Converting between imperial and metric measurements
- Calculating areas, perimeters and volumes
- And much more!

Have you always struggled with math? If you want to work in the skilled trades but don't feel comfortable with the math activities listed above, there are programs that can help. Free adult upgrading programs across Ontario can help you improve your numeracy skills for both your on-the-job and in-school apprenticeship training. They even offer exercises and activities specific to the skilled trades.

If you are considering your next step in apprenticeship, take advantage of the services of a free adult upgrading program so you can brush up on your math skills and be ready to succeed. To find a program near you, visit <https://www.ontario.ca/page/adult-learning-literacy-and-basic-skills#section-4>

### Next steps

Now that you understand more about budgeting wages, grants and loans, tracking your hours and how important math is as an apprentice, you can move on to the next resource in the Apprenticeship Answers series: **Working as an Apprentice.**

## Resources

This quick reference list of helpful websites described “Apprenticeship Answers: By the Numbers” will be useful as you continue your journey into apprenticeship.

- You calculated 10% and 15% wage increases in an activity in this resource. You can also calculate percentages using a calculator like this one: <https://www.percentagecal.com/>
- The Government of Ontario’s Financial Supports for Apprentices website: <https://www.ontario.ca/page/financial-supports-apprentices>
- The Government of Canada’s Trades Math Workbook: <https://www.canada.ca/en/services/jobs/training/initiatives/skills-success/tools/trades-math.html>
- Find a free math upgrading program: <https://www.ontario.ca/page/adult-learning-literacy-and-basic-skills#section-4>

Use the space below to record any new resources you find!

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