





YOUR CAREER STARTS NOW! A Guide to Careers in the Skilled Trades

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"I started my apprenticeship training right out of high school and have never looked back. Today, I run my own business."

Keri Boyko, electrician



Apprenticeship

POST-SECONDARY EDUCATION THAT MATTERS!

Are you still in high school? Maybe you're finished school and looking for a new direction? Or, you are already working and looking for a career that suits you better? If any of this applies to you, an apprenticeship could be what you've been looking for.

Thousands of people like you register as apprentices every year. Why? It's simple.

An apprenticeship is your ticket to a challenging and rewarding career in skilled trades.

RESPECT

Skilled trades are respected because of the important role they play in our economy and society. Think about it, tradespeople build, operate and maintain Canada's infrastructure. They prepare our food and extract our resources. Much of Canada's productivity depends on the highly specialized expertise of tradespeople. It's no surprise they are in high demand from coast to coast.

CAREER OPPORTUNITIES

With more than 300 careers to choose from, there is a skilled trade for every aptitude and interest. The learning never stops. After receiving their certification, many tradespeople move into management positions or teaching careers. Others start their own business or specialize. In terms of professional development, the sky is the limit!

GOOD PAY

People in skilled trades are rewarded for their efforts with good pay, often better than average. In fact, apprentices earn from their first day on the job, making an increasing proportion of a journeyperson's wage as they progress toward certification. Apprentices carry minimal student debt load and, in fact, many have a head start on buying a house or car as a result. One of the best parts of being a tradesperson is that you get paid well for doing work you enjoy.

WHAT IS AN APPRENTICESHIP?

Apprenticeship is a form of post-secondary education like university or college. But there's a big difference. Apprentices not only learn skills in a classroom, but receive paid on-the-job training with an employer.

- Approximately 80% of the training is done on-the-job with an employer and the other 20% is completed in school, in most cases alternating between the two.
- Apprenticeship programs are typically four years long and lead to trade certification.
- This form of training has a number of advantages -- apprentices earn while they learn, can access federal grants, are exposed to practical, hands-on learning, and enjoy job opportunities in every region of Canada.
- Most apprentices are also eligible to receive Employment Insurance benefits while they're in school.

+300 rewarding careers to choose from





WHO CAN TAKE AN APPRENTICESHIP?

Apprenticeships are open to anyone. Age doesn't matter, though many young people start their training directly after high school.



DID YOU KNOW?

Pre-apprenticeship training and youth apprenticeship programs are available in some regions. The work placements allow students who are still in high school to get a running start on their careers in the skilled trades – not to mention earn school credits at the same time!



SKILLED TRADESPEOPLE TOUCH EVERY ASPECT OF OUR LIVES

Where would we be without the skills and knowledge of tradespeople?

Think about it. They build and maintain the homes, infrastructure, services and amenities we use every day – from the moment we get out of bed in the morning, until we go back to sleep again for the night. It is no wonder tradespeople are so proud of their skills!



A guide to Careers in the Skilled Trades

RED SEAL – A SEAL OF EXCELLENCE

Another benefit of completing an apprenticeship is the opportunity to obtain your Red Seal endorsement, industry's standard of excellence. Industry stakeholders and trade experts from across the country established the competencies and standards for 55 Red Seal trades. These trades represent more than 80% of all trade certifications in Canada.



For more information on the Red Seal trades, visit www.red-seal.ca.

"After taking one year of university, I realized that I wanted to do something where I could be outside, work with my hands, and see the direct result of my work at the end of the day."

Patrick Clark, carpenter apprentice

ON THE JOB: TRANSPORTATION / MOTIVE POWER

- Agricultural Equipment Technician
- Aircraft Maintenance Engineer
- Autobody Repairer
- Automotive Electrical Technician
- Automotive Glass Technician
- Automotive Painter
- Automotive Service
 Technician
- Heavy Duty Equipment Technician
- Inboard/OutboardMechanic

Aircraft Maintenance Engineer

Aircraft mechanics install, maintain, repair and overhaul aircraft structures and mechanical and hydraulic systems. They must rigorously check and inspect equipment to make sure hazards are prevented and that they meet Transport Canada's standards of performance and safety. Their work typically consists of taking equipment apart, checking it and diagnosing problems, or performing routine maintenance, such as cleaning and lubricating or adjusting valves and seals. An aircraft mechanic may specialize in specific aircraft systems such as engines, airframes or hydraulic systems. With experience, aircraft mechanics may progress to supervisory positions or, if they have an Aircraft Maintenance Engineer's (AME) licence, they may become aircraft inspectors.

Automotive Service Technician

Automotive service technicians make mechanical repairs and carry out scheduled maintenance on cars, trucks and other motor vehicles using a variety of testing equipment and tools. This process customarily involves the use of computerized diagnostic equipment, such as infrared engine analyzers, spark plug testers and compression gauges. New developments in engines, transmissions and suspension systems, and the increased use of electronic components are changing the mechanic's job into that of a technician, with more emphasis on vehicle diagnosis.

For more information on skilled trades careers, go to www.careersintrades.ca

- Marine Engine Mechanic
- Motive Power Machinist
- Motor Vehicle Body Repairer (Metal and Paint)
- Motorcycle Mechanic
- Parts Person
- Recreation Vehicle
 Service Technician
- Small Engine and Equipment Mechanic
- Transport Refrigeration Mechanic
- Transport TrailerTechnician
- Truck and Transport Mechanic

TRAITS AND TALENTS

Aircraft mechanics need manual dexterity and good hand-eye coordination. Furthermore, they must be in good physical condition, since heavy lifting and climbing may be required. They must also be able to interpret and follow written instructions. An understanding of computerized machinery as well as good communication and analytical skills are very important.



TRAITS AND TALENTS

Automotive service technicians should have a genuine interest in cars and mechanics, mechanical aptitude and knowledge of how automobiles work. They also need analytical abilities and problem-solving skills to understand and diagnose malfunctions quickly and accurately. With the introduction of increasingly complex technology, knowledge of computers and electronics is essential.



ON THE JOB: CONSTRUCTION AND MAINTENANCE

- Boilermaker
- Bricklayer
- Cabinetmaker
- Carpenter
- Concrete Finisher

- Construction Electrician
- Drywall, Finisher and Plasterer
- Floorcovering Installer
- Glazier

- Heavy-Duty Equipment
 Technician
- Hoist Operator
- Industrial Instrument Mechanic

Heavy Equipment Operator

The work of heavy equipment operators is all around us, although we may not realize it. Without the dozers, excavators, tractor-loader-backhoes, articulated haul trucks, loaders and graders handled by trained operators, we wouldn't have the bridges, roads, buildings, airports and other large structures we encounter on a daily basis.

Not only are these skilled tradespersons responsible for operating a variety of heavy equipment, but they are also required to check their equipment pre-operation, conduct basic maintenance such as lubricating components, and keep records to ensure equipment is maintained. Heavy equipment operators are also expected to be familiar with relevant municipal codes and bylaws, highway traffic acts, health and safety acts, and natural gas regulations both for public safety and their own.

Cabinetmaker

Cabinetmaking involves more than simply designing, building and repairing cabinets. It encompasses working with a variety of structures such as doors, windows and window frames, and all types of furniture. Cabinetmakers must follow blueprints and designer specifications exactly to construct and repair wooden articles. Today, sophisticated equipment, basic woodworking machines, and portable power and hand tools are used to perform many of the job functions.

Cabinetmakers must have a broad knowledge of wood, its structures and properties, and an assortment of cabinetry hardware and materials. A worker with training and education could start in production and work their way up to a supervisory or management position in the wood industry, as the skills are transferable to a number of other professions.

- Insulator (Heat and Frost)
- Ironworker
- Locksmith
- Metal Fabricator (Fitter)
- Mobile Crane Operator

- Oil Burner Mechanic
- Painter and Decorator
- Plumber
- Roofer
- Sawfiler/Fitter
- Sheet Metal Worker
- Sprinkler System Installer
- Water Well Driller
- Welder

TRAITS AND TALENTS

Heavy equipment operators need to have good eye-hand coordination and mechanical aptitude to manoeuvre and maintain the large equipment they use. Alertness and concern about safety are other key traits due to the size and power of the machinery involved in the work. Awareness of surroundings is important since the noise of the equipment can block out the sounds of your environment, and you may need to rely on hand signals, flags or radio communication to get direction on where to move materials or other cargo.



Cabinetmakers like to build things and work with their hands. They should be physically fit and have strong math skills, manual dexterity and good hand-eye coordination. They must also be able to read, interpret and accurately follow blueprints, drawings and other design specifications. What's more, a cabinetmaker's artistic touch and creativity are often as important as their woodworking abilities in the development and design of new products.





ON THE JOB: MANUFACTURING /INDUSTRIAL

- Automotive Machinist
- Drillers and Blasters
- Graphic Arts (Bindery, Press or Pre-Press)
- Heavy Equipment Operator
- Hoist Operator (Construction, Mobile Crane, Conventional Crane or Hydraulic Crane)
- Industrial Electrician
- Industrial Instrument Mechanic
- Industrial Mechanic (Millwright)
- IndustrialWarehouseperson

Tool And Die Maker

Any ideas on what a tool and die maker does? It may come as a surprise to you, but they are among the most highly skilled workers in the economy. They produce tools, dies, and special moulds for the machines that make many of the products and equipment we use everyday like clothes, airplanes, furniture and even candy. Tool and die makers work from drawings, computer-aided designs, and must have a good grasp of the properties of metal, plastic, rubber and composite materials.

Machinist

A machinist is to metal what a carpenter is to wood. They set up and run machines that cut or grind metal and other materials into products with very precise dimensions. Their expertise is usually called upon to make a single part, such as the mechanism that installs windshields on a car assembly line. Their work is forever evolving due to the rapid pace of technological change.

- Instrumentation and Control Technician
- Lather (Interior Systems Mechanic)
- Machinist
- Metal Fabricator (Fitter)

- Mould Maker
- Power System Electrician
- Power System Operator
- Rig Technician
- Sawfiler/Fitter

- Stationary Engineer
- Tool and Die Maker
- Welder

TRAITS AND TALENTS

Tool and die makers must be excellent problemsolvers. They must also be good with computers and quickly adapt to technological advances in robotics and lasers. Most tool and die makers have a background in mathematics and physics. The work can be physically demanding.



TRAITS AND TALENTS

Machinists like working with tools and equipment. They are patient, have excellent hand-eye coordination and manual dexterity. They must also have a background in mathematics and be knowledgeable about the properties of metal, plastic, rubber and composite materials. They must be very safety conscious and in good physical condition.



ON THE JOB: SERVICE

- Appliance Service Technician
- Arboriculturist
- Child and Youth Worker
- Community Antenna Television Technician
- Cook
- Early Childhood Educator
- Electric Motor System Technician
- Elevator Constructor and Mechanic
- Food and Beverage Server
- Graphic Arts
- Hairstylist
- Horticulturist (Landscaper-Greenskeeper)

Graphic Arts Technician

Graphic arts technicians such as animation painters, copy stylists, paste up artists, sign painters, stencil makers and lettering artists produce and assemble artwork, photographs, lettering and drawings, using the latest in desktop publishing software. They assist in conceptualizing a project, interpreting design specifications or sketches, and preparing production materials for press, electronic or multimedia publishing. Their handiwork is behind many of the most popular advertisements, magazines, newspapers, billboards and catalogues you see every day.

Cook

There are two main types of cooks (also known as chefs): institutional cooks who prepare a small selection of entrees, vegetables and desserts in large quantities, and restaurant cooks who prepare a wider selection of dishes in individual servings. The chef is generally the most highly-skilled, trained and experienced of the kitchen's staff.

Cooks are responsible for planning menus, ensuring food quality, deciding the size of servings, estimating material and labour costs, administering budgets and hiring staff. The head chef supervises the activities of sous chefs, specialist chefs and cooks, and instructs them in the preparation, cooking, garnishing and presentation of food.

- IndustrialWarehouseperson
- Information Technology Network Technician
- Jeweler and Goldsmith
- Locksmith Services
- Meat Cutter Services
- Network Cabling Specialist
- Optics Technician
- Special EventsCoordinator
- Stationary Engineer
- Upholsterer

TRAITS AND TALENTS

Graphic arts technicians have a keen eye for design and should be able to accommodate the needs of others, such as clients. Time management skills are essential as many graphic arts technicians work in highly deadline-driven environments. Superior knowledge of computers, animation and illustration are important assets.



TRAITS AND TALENTS

Cooks must be highly organized in order to schedule food preparation, coordinate the work of the kitchen staff, and ensure that quality food supplies are available in the right quantities. Good interpersonal skills are essential for communicating effectively with customers and other employees. In addition, cooks should be people-oriented and team players, as they work closely with kitchen and service staff. As the presentation of a meal is almost as important as the preparation of its ingredients, many cooks have a creative and artistic flair. A keen sense of taste and smell are also necessary.



Key Benefits of Apprenticeship

There are lots of benefits of taking an apprenticeship:

EARN WHILE YOU LEARN ON THE JOB

Apprentices are given a salary by the employers that hire them. The apprentice's salary may increase each year as they progress toward certification.

KEEP STUDENT DEBT LOW

Another big benefit of apprenticeship training is that debt loads after completion of apprenticeships are much lower since apprentices "earn while they learn."

A JOB GUARANTEE

Skilled workers are in demand across the country and around the world.

A good work ethic, a can-do attitude and a Certificate of Qualification will almost guarantee a job upon completion. The skills gained through apprenticeship are the starting point for exciting, varied careers.

RECEIVE PERSONAL TRAINING AND MENTORSHIP

Apprentices have an opportunity to develop their skills through personal, on-the-job training from a highly-qualified journeyperson. These mentors share their experience and pass along valuable insights about how to do their jobs.

ACQUIRE A SKILL THAT WILL LAST A LIFETIME

As a tradesperson, the skills learned will not only last a lifetime; they will also open doors to other opportunities. Journeypersons can take advanced training to continue developing their talent and work their way into challenging and rewarding careers in management or teaching. Many start their own businesses.



MYTH 1:

Skilled trades are not for students who get good grades

REALITY! This is simply not true and is probably the most common misperception about skilled trades. The reality is that skilled trades require individuals with strong essential skills such as reading and writing, math and sciences.

Like university and college, successfully completing an apprenticeship takes intelligence, dedication, focus and hard work. Tradespeople are regularly called upon to perform a range of complex tasks, such as:

- Reading and interpreting blueprints for building an office tower
- Analyzing various elements (such as weather conditions, weight and distance)
 while operating a crane situated on a 10-story building
- Identifying the potential volume of water and its resulting pressure when installing a sewage system for a hospital

MYTH 2:

A university degree is the only post-secondary education that provides a good future.

REALITY! Achieving a Certificate of Qualification for a skilled trade is a ticket to a good future. Tradespeople are in demand, earn good pay, have the ability to work across the country and benefit from solid job security. With the imminent skills shortage, increased demand for skilled labour and an aging population, the high demand for tradespeople will not diminish.

MYTH 4:

Jobs in the trades are dead-end jobs



REALITY! Many skilled trades jobs are in sectors that offer year-round work, such as mining, forestry, oil & gas, service and manufacturing. And, although it used to be that outdoor infrastructure projects were put on hold until the frost left the ground, now it is quite common to see skilled workers building roads and skyscrapers during the winter months. Although there is no denying that Canada's climate makes it more challenging to be a skilled worker, with today's technology, it is possible to work in all types of weather. For example, new technology enables tradespeople to work all year in the construction trades. Simply adding propane heating and insulated tarps for example, creates a feasible work environment. Specialty clothing has also helped tradespeople work through the cold winter months.

REALITY! Skilled trades offer not just jobs, but careers! There are many chances for advancement within a trade from supervisory positions to management positions, to the possibility of owning your own business. You may even find yourself teaching at a technical training institute or mentoring your own apprentices as a certified journeyperson. The level of advancement is up to the capability and desire of the tradesperson.

MYTH 5:
Skilled trades don't pay well.

REALITY! The skilled trades offer great incomes!

Many trades provide earnings above the national average. Not only do tradespeople earn above-average incomes, they also complete their studies without being overwhelmed by debt. By taking an apprenticeship and learning a trade, apprentices can 'earn as they learn', decreasing the amount of debt they may incur during their post-secondary training. In addition, the federal government offers taxable cash grants to eligible apprentices in Red Seal trades. Selecting a skilled trades career and taking an apprenticeship makes good financial sense!

MYTH 6: Skilled trades are dirty and noisy

REALITY! There is no doubt that many trades involve "hands-on" work. But this is why many people work in trades in the first place! They consider this type of work far more rewarding than a job that requires a lot of desk work.

That said, it is important to remember that technology and new techniques have greatly changed the face of trades. Today, an increasing amount of mechanical equipment is operated with the aid of computer software. Therefore, more and more trade workers work indoors, using sophisticated computer equipment and technology. For example, it's not uncommon these days for an automotive service technician to turn on a computer before sticking his or her head under the hood of a car!

MYTH 8:

Women do not have the physical strength to perform in the skilled trades

REALITY! Physical work does not rely on physical strength alone. In fact, skilled trades require dexterity, stamina, good hand-eye coordination and balance - all attributes that women and men possess equally.

MYTH 7:

Skilled trades are physically demanding

REALITY! There is certainly a physical aspect to many trades. For many people, this type of work is more attractive to them than a career that requires a lot of time in an office. However, it is important to clarify that there are a diversity of trades and each has a unique workplace environment. We are more likely to hear tradespeople rave about the creativity and problem-solving challenges of their work than complain about physical demands.

Technology has also changed the nature of many of the trades. People interested in working in the skilled trades need to operate computer software and mechanical equipment that has become incorporated into these jobs.

5 STEPS TO AN APPRENTICESHIP

STEP 1

FINISH HIGH SCHOOL

Complete your secondary school education. Like university or college, the entrance requirement for most trades includes Grade 12. A youth apprenticeship program is also an option while you are in high school.

STEP 2

FIND A TRADE

There are more than 300 skilled trades in Canada, but which one is right for you? Assessing your interests, skills, aptitude and the kind of lifestyle you want is never an easy process. You should talk to your career /guidance counsellor at school and your parents, as well as consult your local apprenticeship office. Take some time to consider what trades are in demand in your region.

STEP 3

FIND AN EMPLOYER TO HIRE YOU

Once you have picked a trade, you must find an employer to hire you. Approach this task like any other job search, bearing in mind that up to 80% of all job openings are never advertised. Consider asking employers to meet with you to discuss the trades they need, then expressing interest in any upcoming opportunities.

STEP 4

REGISTER

Once you have found an employer to hire you, you'll need to register as an apprentice. Follow the steps established by the apprenticeship authority in your province or territory and sign the required contract with your employer. The contract outlines:

- The length of the training program
- The skills that must be learned
- The wages

STEP 5

START YOUR CAREER

After completing the program requirements and passing the required exam(s) for your chosen trade, you'll receive a Certificate of Qualification.

Congratulations! Consider the next steps on your career path... the possibilities are endless.

To learn more about becoming an apprentice, go to www.careersintrades.ca

TIPS FOR FINDING AN EMPLOYER

NETWORK! NETWORK! NETWORK!

- Discover the "hidden" job market by going around to businesses that are in the trade you are interested in.
- Ask your career counsellors for advice. Consult your local apprenticeship authority, joint labour/management training boards, and trade associations to see if they know any employers who are looking for an apprentice.
- Tell everyone you know and everyone you meet that you are looking for a job.

- Carry a résumé with you. Leave it with every employer you speak to – even if they are not hiring.
- Get the names and phone numbers of the employers or supervisors you've reached out to. Follow up with them.
- Gain experience in the trade and exposure to employers by taking a pre-apprenticeship or youth apprenticeship program.
- Search online job boards for résumé and interview tips, and to learn about the employers who are hiring.

You can also find an employer the old-fashioned way – by pounding the pavement and scanning the classifieds in newspapers or online. Some of today's most popular online job boards include:

- monster.ca
- workopolis.com
- workingincanada.gc.ca
- jobbank.gc.ca
- canadajobs.com
- apprenticesearch.com
- labourmarketservices.gov.bc.ca

FAST FACT

For six consecutive years (2007-2012), employers from around the world have reported that skilled trades positions are among the top five most difficult jobs to fill.

Talent Shortage Surveys 2011 and 2012 by ManpowerGroup.

"Apprentices not only benefit from the 'earn while they learn' dynamic of the apprenticeship training process, they also become confident of the security and accomplishment that mastering a trade provides."

Ken Georgetti, President, Canadian Labour Congress

More Questions? We Have Answers

WHO IS RESPONSIBLE FOR APPRENTICESHIP TRAINING?

Regulating apprenticeship training is the responsibility of the provincial or territorial government. Each of the partners in apprenticeship – the employer, the apprentice, the journeyperson and the technical training institute – have specific responsibilities associated with training and certification.

WHO CAN EMPLOY AN APPRENTICE?

Only employers who have a qualified journeyperson on staff to mentor an apprentice are able to hire apprentices, as well as those who adhere to all health and safety legislation within a jurisdiction.

DOES AN APPRENTICE NEED TO COMPLETE THEIR TRAINING WITH ONE EMPLOYER?

No. However, it is necessary that both the apprentice and the new employer notify their local apprenticeship authority about this change. All of the training documentation is required from previous employers to verify the required skills have been obtained by the apprentice.

WHERE DOES TECHNICAL TRAINING TAKE PLACE?

The majority of apprenticeship programs involve technical training at community colleges or industry training centres. In some trades, private colleges also provide apprenticeship training. Completing some of the technical training online can be an option, too. Check with your technical training provider or your provincial/territorial apprenticeship authority.

WHAT IS CERTIFICATION?

Certification is a term used by most provincial and territorial governments to indicate that an individual has the necessary training requirements and has passed the certification examinations required within their trade. It shows both customers and employers that you have the skills and experience to practice your trade.

IS CERTIFICATION MANDATORY IN ALL TRADES?

No, not all trades require certification. However, there are some trades that are compulsory, meaning that they must be practiced only by certified journeypersons and registered apprentices. Certification is voluntary in other trades. Check with your provincial/territorial apprenticeship authority in your region to learn more.

WHY IS IT IMPORTANT TO BE CERTIFIED?

Being a certified journeyperson is a real advantage in today's workforce.
Certification is proof that a tradesperson has all the training and skills needed to perform tasks – this is important to many employers and to customers.

IS A HIGH SCHOOL DIPLOMA NECESSARY TO BECOME AN APPRENTICE?

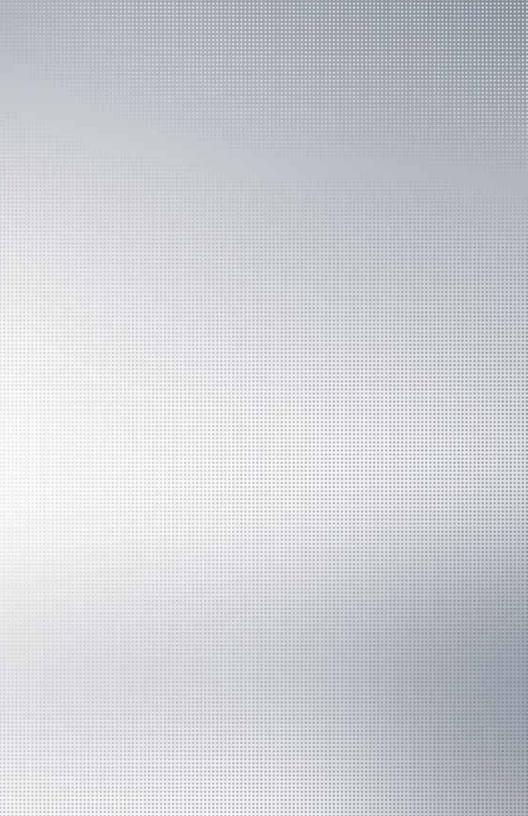
Most apprenticeship programs require a high school diploma. However, there may be exceptions based on the employer and the minimum requirements that are needed to enter into an apprenticeship program which is determined by the province or territory. Employers generally prefer an apprentice that has finished their secondary education, but they also consider the attitude, aptitude and current skills of the youth to perform job requirements.

ARE THERE ANY OPPORTUNITIES FOR APPRENTICESHIP IN HIGH SCHOOL?

Many provincial/territorial governments have introduced special programs for secondary school students who are interested in apprenticeship. These programs offer early training in the trades and opportunities to combine school and work.

HOW MUCH DOES IT COST TO COMPLETE AN APPRENTICESHIP?

Apprenticeships cost less than other post-secondary options. Tuition costs vary depending on the trade and the province/territory. There may be additional costs for books, equipment, tools and living expenses. However, apprentices are paid during their on-the-job training. There are also a number of grants and tax credits available to reduce the cost of apprenticeship training. Consult your local apprenticeship office to learn more about both federal and provincial/territorial supports.





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