# VOCATIONAL/TRADES TESTING
## FOR ENTRY LEVEL PROGRAMS

<table>
<thead>
<tr>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Service Technician</td>
</tr>
<tr>
<td>Plumbing &amp; Piping Trades Certificate</td>
</tr>
<tr>
<td>Carpentry/Joinery</td>
</tr>
<tr>
<td>Collision Repair/Painting &amp; Refinishing</td>
</tr>
<tr>
<td>Culinary Arts Certificate</td>
</tr>
<tr>
<td>Electrical Pre-Apprenticeship</td>
</tr>
<tr>
<td>Aircraft Maintenance Engineer (M)</td>
</tr>
<tr>
<td>Aircraft Maintenance Engineer (S)</td>
</tr>
<tr>
<td>Heavy Mechanical Trades Foundation</td>
</tr>
<tr>
<td>Refrigeration &amp; Air Conditioning Mechanic</td>
</tr>
<tr>
<td>Recreation Vehicle Technician</td>
</tr>
<tr>
<td>Residential Construction</td>
</tr>
<tr>
<td>Welding Foundation</td>
</tr>
<tr>
<td>Studio Woodworking Certificate</td>
</tr>
<tr>
<td>Sheet Metal Worker</td>
</tr>
<tr>
<td>Pastry Arts Certificate</td>
</tr>
</tbody>
</table>

**PLEASE NOTE: ALL APPLICANTS MUST HAVE PHOTO ID**

Please note that all students must pay a $25 test processing fee prior to writing these tests. Payment can be made at any Okanagan College campus by cheque, cash, or debit. Credit cards will not be accepted. The results of your test will not be released to the Admissions office until payment has been made.

Applicants who live outside the Okanagan College region or who cannot attend the scheduled sessions may make arrangements to write the tests at their local school, college, university, library etc. Please phone 1-800-621-3038 or email trades@okanagan.bc.ca with the name and telephone number of the institution as well as the name and email address of the person who will be supervising the exam session. For students writing at another institute, payment of the $25 test processing fee can be made through on-line banking (Payee: Okanagan College, Account Number: Student Number).

The ABLE English and ABLE Math tests are each approximately 45 minutes long. There is no calculator allowed during the Math section. All applicants to the above mentioned programs must successfully complete both tests. Test scores are valid for a maximum of 2 years.

**Kelowna:** By appointment only
Please contact 1-800-621-3038 to make an appointment.

**Vernon:** By appointment only
Please contact 250-545-7291 ext. 2672 to make an appointment.

**Penticton:** By appointment only
Please contact Anna Wolleben at 250-492-4305 ext. 3310 to make an appointment.

**Salmon Arm:** By appointment only
Please contact Heather DeVries 250-832-2126 ext. 8265 to make an appointment.

**Revelstoke:** By appointment only
Please contact 250-837-4235 to make an appointment.

**Bookings can often be made on a next day basis**
TRADES AND APPRENTICESHIP
Pre-Entrance Test for Trades Programs

These tests are based on a Grade 10 level of math and reading comprehension, and Grade 12 level of math and reading for Electrical. See scores required for pass or fail below.

Reading Comprehension

The reading section tests the students’ comprehension ability. The student will have to read several short stories and then answer multiple-choice questions. There is no writing involved. Students must get a minimum score of 37/48 (77%) to pass the reading test. For Electrical scores must be 42/48 (88%).

Math Test

The answers are all multiple choice. Students must get a minimum score of 25/40 (63%) to pass the math test for all programs except for the following. Electrical Pre-Apprenticeship Certificate 34/40 (85%) and Culinary Arts Certificate 20/40 (50%).

Calculators are not allowed.

- Basic math: addition, subtraction, division (including long division), and Multiplication including multiplying 3 numbers by 3 numbers (i.e. 356 x 421)

- Fractions – adding, subtracting, dividing and multiplying 
  (i.e. 2 ½ + 1 ¼ =) (5/8 ÷ 1/5 =)

- Converting fractions to decimals and vice-versa 
  (i.e. 4/5 is equal to what decimal) (45% is the same as what fraction)

- Converting fractions & decimals to percentages 
  (i.e. 4/5 is equal to what percentage)

- Adding, subtracting, and multiplying negative numbers 
  (i.e. –2 – 6 =)

- Approximately six algebra questions 
  (i.e. If 2X/4 + 3 = 7, then X =)

- Roots and Powers 
  (i.e. ) 625

- Ratio and Proportion 
  (i.e. If N/16 = ¾, N= )

** Sample Math & English Comprehension Test (next page)
Foundation and Pre-Apprenticeship

Math & English Comprehension Test

Congratulations on applying for one of the trades ELTT or Pre-Apprenticeship programs at OC. Math might be used in your program to calculate rafters, measure parts, or to calculate volumes or areas. There will be many reading assignments and exams that will require you to use your reading comprehension skills. Math and English skills like any other skill can become weak if they are not used regularly. However, it is important to have solid Math and English skills before starting your program. Prior to writing the Trades entrance exams you may find it useful to refresh your skills.

If you find that you are not able to complete any of the questions, perhaps a textbook from your local library might help. Also, www.math.com provides a good review of math concepts. Upgrading courses are also available through the Adult Basic Education department at OC.

Pre-Entrance Trades Test - English

Example Questions

A - These type of questions test your understanding.

1. A person who moves to this country from another country to live is a / an:
   a) Immigrant
   b) Traveler
   c) Itinerant
   d) Ignorant

2. Botany is the study of:
   a) Boats
   b) Plants
   c) Buildings
   d) Horticulture

B - For the next section of the English test, you will be required to read text, and then answer questions on it. There are around 10 different text examples, each with a few questions. **The way to prepare for these types of questions is to practice reading text, and understanding the information given. Read newspaper articles, advertisements and Poems.
Example

Legend has it that a 14th Century Taoist monk created this ancient martial art, while watching the battle between a crane and a snake in a dance to the death.

“Tai Chi”, which means “Grand Ultimate Fist”, was taught secretly by certain families, and was not available to the general public for hundreds of years.

Today, touted as an excellent activity for people of any age with neurological impairments, the slow-moving, meditative dance gracefully and gently exercises limbs, muscles, joints, tendons, bones and, on another level, the soul. It helps make motion more liquid, and teaches inner self-discipline. Arms open gracefully and legs gain strength because of prolonged “rooted” positions. The benefits include lower blood pressure, stress reduction, improved muscle tone, and circulation. Several years ago, in a Tai Chi study conducted by Emory University (May ’96; Journal of American Geriatrics Society), balance problems and falls – common problems for people with MS – were significantly reduced by a whopping 47.5 percent with a group of 128.

3. Why does Tai Chi help to build leg strength?
   a) Because it is a meditative dance
   b) Because it teaches inner self-discipline
   c) Because one stays in prolonged positions
   d) Because it improves circulation

4. Tai Chi is supposedly good for people who have Multiple Sclerosis, and other neurological conditions, but what age should they be to practice.
   a) Any age
   b) 14th Century
   c) 47.5
   d) over 21

Reading Answer Key:
1) A 2) B 3) C 4) A
Pre-Entrance Trades Test - Math

Example Questions - Answer Key at end of exam

All the Math questions have multiple choice answers. If the answer does not appear as a choice, you may choose NG – not given.

1. \(4 \times 6 =\)
   a) 64  
   b) 24  
   c) 6 \(\frac{1}{4}\)  
   d) –4  
   e) NG

2. \(42 + 23 =\)
   a) 19  
   b) 29  
   c) 56  
   d) 64  
   e) NG

There are several types of math problems on the tests including whole numbers, fractions, decimals, ratio and proportion, percent, roots and powers, algebra and finally circumference, area and volume.

I. WHOLE NUMBERS

1. \(7589 + 654 + 2694 + 7501 =\)
2. \(4500 – 786 =\)
3. \(895 \times 64 =\)
4. \(7895 \div 56 =\)
5. Is the sum of 4659 and 1458 greater than the difference between 45698 and 34891
   a) yes  
   b) no
II. FRACTIONS (answers as fractions)

6. \[16 \frac{3}{4} + 19 \frac{3}{5} =\]

7. \[12 \frac{1}{3} - 10 \frac{1}{4}\]

8. \[4 \frac{1}{2} ÷ 2 \frac{1}{4}\]

9. Which of the following fractions is the smallest?
   a) \(\frac{3}{4}\) b) \(\frac{1}{2}\) c) \(\frac{7}{16}\) d) \(\frac{17}{32}\)

III. DECIMALS

10. \[15.6 \times 0.032 =\]

11. \[59.65 ÷ 7.4 =\]

12. \[15 + 4.45 + 0.8 + 446.4 =\]

13. Write 0.564 as a common fraction

14. Express 6 \(\frac{3}{8}\) as a decimal number

IV. RATIO AND PROPORTION

15. If \(\frac{N}{16} = \frac{3}{4}\), \(N =\)

16. If a 4 metre high round water tank filled to the 4 metre level holds 20 kL of water, how many kL of water would the tank hold filled to the 3 metre level?

17. A particular machine has a 4.3” diameter pulley that turns at 1725 RPM; how fast does another pulley, 2.78” in diameter, turn if they are connected by a drive belt (round off to the nearest whole number)?
V. PERCENT
18. 15% of $35.60 =
19. What percent of 160 is 8?
20. Write 15 ¾% as a decimal.
21. Express 1/2 % as a fraction.
22. If a person’s wage was increased by 15% and the old rate was $12.00 per hour, how much would now be earned for 8 hours of work?

VI. ROOTS AND POWERS
23. $0.6^2 =$
24. $\sqrt{625}$
25. Which of the following numbers is the largest?
   a $\sqrt{900}$
   b $6^2$
   c $3^3$
   d $2^4$

VII. ALGEBRA
26. If $32 = 7N - 3$, then $N =$
27. If $D = F/E$, then $F =$
28. If $2X/4 + 3 = 7$, then $X =$
29. If $5/9 (F-32^0) = C$, Calculate $C$ when $F = 68^0$
30. A machinist needs to use two shims with a combined thickness of 0.084. One shim is to be three times as thick as the other. What are the thickness of the shims?

Math Answer Key (next page)
Math Answer Key:

I. WHOLE NUMBERS
1. 18,438
2. 3,714
3. 57,280
4. 140 and 55 remainder
5. b) no

II. FRACTIONS
6. \(36 \frac{7}{20}\)
7. \(2 \frac{1}{12}\)
8. 2
9. g) 7/16

III. DECIMALS
10. 0.499
11. 8.06
12. 466.65
13. 141/250
14. 6.375

IV. RATIO AND PROPORTION
15. \(N = 12\)
16. 15 kL
17. 2668 RPM

V. PERCENT
18. 5.34
19. 5%
20. 0.1575
21. \(5/1000\)
22. $110.40

VI. ROOTS AND POWERS
23. .36
24. 25
25. b) \(6^2 = 36\)

VII. ALGEBRA
26. \(N = 5\)
27. \(F = DE\)
28. \(X = 8\)
29. \(C = 20\)
30. 0.021 and 0.063