

# Cat5 Level 20 Teacher's Guide

(Semester) Spring testing: May 1<sup>st</sup> – June 30

## Language and Mathematics Subtests

Please note that *Cat5 Level 20 subtests* cover the *Grade 10 curriculum*, so it is intended for students who have completed most of Grade 10. The testing dates are noted above, please administer the tests within that timeframe.

### Language Subtests

	Requirements	Administration Times
Reading		60 minutes
Word Analysis		
Vocabulary		
Writing Conventions		40 minutes
Spelling		

### Mathematics Subtests

	Requirements	Administration Times
Mathematics*	Calculators permitted	70 minutes
Computation & Estimation		
Real World Math		

\*Please refer to Appendix B to determine which stream the course code refers to in your province.

## Reminders

- Teachers should administer *each* subtest in one sitting.
- (For Language subtests) Administer the Reading subtest first.
  - The contexts for many of the questions in the language subtests are taken from themes found in the Reading subtest.
- Refer to **Appendix A** below to determine the *English Language courses* in your province that are associated with each subtest.
- Refer to **Appendix B** below to determine the *Secondary Mathematics courses* that are associated with each subtest.
  - Teachers who teach both streams in *Academic/Applied, Foundations/Pre-Calculus, or College/University* should create separate test sessions to provide students with the correct test (e.g. Academic students will have access to the Academic test session).
- Refer to **Appendix C** below to view the *Secondary Mathematics Formulas* for ON and WNCP curriculum.
  - To print out the appropriate formula sheet for your students, please visit the Cat5 website and select “*Math Formula Sheets*” under Resources.
  - Please remind students to use  $\pi = 3.14$  for ALL calculations using  $\pi$ .

## Pause and Log Out Sessions

- In order to pause the session during a test sitting, teachers can locate the **Pause Session** button on their Teacher Dashboard in the **Session Details** page.
  - Students must select the **Next button [>]** in order for the pause to be triggered.
- After you return from a break, click on **Resume Session** to give access to students without them having to log in again.
- At the *end of each sitting*, please select **Pause Session** if the devices will not be used for anything else.
- At the *end of the testing day*, always select **Log Out Session for all** on the Teacher Dashboard (in Session Details page) to ensure that students do not continue the test outside of the classroom or outside of your scheduled testing time.

For other user documentation, please visit: [Cat5 Resources](#).

## Appendix A: English Language Guide for Secondary Teachers

Provinces	Grade 9		Grade 10		Grade 11		Grade 12	
<b>ON</b>	Applied English (ENG1P)	Academic English (ENG1D)	Applied English (ENG2P)	Academic English (ENG2D)	English College (ENG3C)	English University (ENG3U)	English College (ENG4C)	English University (ENG4U)
<b>SK</b>	ELA 9			ELA A10 and ELA B10		ELA 20		ELA A30 and ELA B30
<b>AB</b>	ELA 9		ELA 10-2	ELA 10-1	ELA 20-2	ELA 20-1	ELA 30-2	ELA 30-1
<b>BC</b>	ELA 9			Literary Studies 10, English First Peoples Literary Studies 10		Literary Studies 11, English First Peoples Literary Studies and Writing 11		English Studies 12, Literary Studies 12, English First Peoples 12
<b>MB</b>	Grade 9 ELA			ELA 20F		ELA Comprehensive Focus 30S, ELA Literary Focus 30S, ELA Transactional Focus 30S		ELA Comprehensive Focus 40S, ELA Literary Focus 40S, ELA Transactional Focus 40S
<b>NB</b>	English 9			English 10		Englis 112		English 122
<b>QC</b> (English only)		Eng632-306, ENG-306-3, and ENG-3062-3		ENG-632-406, ENG-4061-3, and ENG-4062-3	Secondary Year 4 English/SELA IV 630-416, ENG-4061-3 and ENG-4062-3 (CERP)	ENG 5016-3 and 5062-3 (STG), Secondary Year 4 ENG/ SELA IV, CERP	Secondary Year 5 English/SELA V (English as a First Language) 630-516, ENG-5061-3 and ENG-5062-3 (CERP)	
<b>NS</b>		ELA 9		English 10: Foundation Year		English 11		English 12
<b>PE</b>		ELA 9		ELA 10, ENG421A, and ENG421B (Pre-IB)		ELA 11, ENG 521A		ELA 12, English 621A
<b>NL</b>		ELA 9		English 1201		English 2201		English 3201
<b>NT</b>		ELA Grade 9		ELA 10-1	ELA 20-2	ELA 20-1	ELA 30-2	ELA 30-1
<b>NU</b>		ELA Grade 9		ELA 10-1	ELA 20-2	ELA 20-1	ELA 30-2	ELA 30-1
<b>YK</b>		ELA 9		Literary Studies 10, English First Peoples Literary Studies 10		Literary Studies 11, English First Peoples Literary Studies and New Media 11		English Studies 12, Literary Studies 12, English First Peoples 12

## Appendix B: Mathematics Guide for Secondary Teachers

Provinces	Grade 9*	Grade 10		Grade 11		Grade 12	
		Applied	Academic	College	University	College	University
<b>ON</b>	Mathematics (MTH1W)	Foundations of Mathematics (MFM2P)	Principles of Mathematics (MPM2D)	Foundations of College Math (MBF3C) Functions & Applications (MCF3M)	Functions (MCR3U)	Mathematics for College Technology (MCT4C)	Advanced Functions (MHF4U)
<b>W.N.C.P.</b>	<b>Mathematics</b>	<b>Mathematics</b>		<b>Foundations</b>	<b>Pre-Calculus</b>	<b>Foundations</b>	<b>Pre-Calculus</b>
<b>SK</b>	Mathematics	Foundations of Mathematics and Pre-Calculus 10		Foundations of Mathematics 20	Pre-Calculus 20	Foundations of Mathematics 30	Pre-Calculus 30
<b>AB</b>	Mathematics	Mathematics 10c (combined)		Mathematics 20-2	Mathematics 20-1	Mathematics 30-2	Mathematics 30-1
<b>BC</b>	Mathematics 9	Foundations of Mathematics and Pre-Calculus 10		Foundations of Mathematics 11	Pre-Calculus 11	Foundations of Mathematics 12	Pre-Calculus 12
<b>MB</b>	Mathematics (10F)	Intro to Applied and Pre-Calculus Mathematics (20S)		Applied Mathematics (30S)	Pre-Calculus Mathematics (30S)	Applied Mathematics (40S)	Pre-Calculus Mathematics (40S)
<b>NB</b>	Mathematics 9	Geometry, Measurement, and Finance 10		Foundations of Mathematics 110	Pre-Calculus 110	Foundations of Mathematics 120	Pre-Calculus A 120
		Number, Relations, and Functions 10					Pre-Calculus B 120
<b>QC</b>	Cycle 2 First Year Mathematics	Cycle 2 Second Year Mathematics <i>Technical &amp; Scientific Option or Science Option</i>		Cycle 2 Third Year Mathematics <i>Technical &amp; Scientific Option</i>	Cycle 2 Third Year Mathematics <i>Science Option</i>		
<b>NS</b>	Mathematics	Mathematics 10		Mathematics 11	Pre-Calculus	Mathematics 12	Pre-Calculus 12
<b>PE</b>	Mathematics	Foundations and Pre-Calculus		Foundations	Pre-Calculus	Foundations	Pre-Calculus 12
<b>NL</b>	Mathematics	Mathematics 1201		Mathematics 2201	Mathematics 2200	Mathematics 3201	Mathematics 3200
<b>NT</b>	Mathematics	Mathematics 10c (combined)		Mathematics 20-2	Mathematics 20-1	Mathematics 30-2	Mathematics 30-1
<b>NU</b>	Mathematics	Mathematics 10c (combined)		Mathematics 20-2	Mathematics 20-1	Mathematics 30-2	Mathematics 30-1
<b>YK</b>	Mathematics	Foundations and Pre-Calculus		Foundations of Mathematics	Pre-Calculus	Foundations	Pre-calculus

\*As of 2021, the mathematics subtest for grade 9 in all provinces is called "Mathematics", with no distinct streams.

## Appendix C: Mathematics Formula Sheets\*

\*To print Formula Sheet, go to: [Cat5 website](#) -> Resources -> Math Formula Sheets, and select the appropriate grade & curriculum.

Ontario Grade 10 Academic and Applied Math	W.N.C.P. Grade 10 Mathematics
<p><b>Pythagorean Theorem</b>  <math>a^2 + b^2 = c^2</math>, where <math>c</math> is the length of the hypotenuse</p> <p><b>Linear Relations</b>            Slope: <math>m = \frac{y_2 - y_1}{x_2 - x_1}</math></p> <p><b>Quadratic Formula</b>  <math display="block">x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}</math></p> <p><b>Trigonometry</b>  <math>\sin \theta = \frac{opp}{hyp}</math>     <u>Sine Law:</u>     <u>Cosine Law:</u>  <math>\cos \theta = \frac{adj}{hyp}</math>     <math>\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}</math>     <math>a^2 = b^2 + c^2 - 2bc \cos(A)</math>  <math>\tan \theta = \frac{opp}{adj}</math></p>	<p><b>Pythagorean Theorem</b>  <math>a^2 + b^2 = c^2</math>, where <math>c</math> is the length of the hypotenuse</p> <p><b>Linear Relations</b>            Slope: <math>m = \frac{y_2 - y_1}{x_2 - x_1}</math></p> <p><b>Trigonometry</b>  <math>\sin \theta = \frac{opp}{hyp}</math>  <math>\cos \theta = \frac{adj}{hyp}</math>  <math>\tan \theta = \frac{opp}{adj}</math></p>
<b>Area and Volume:</b> for ALL calculations on the test using $\pi$ , always use $\pi = 3.14$	
Circumference and Area of a <b>circle</b> with radius $r$ $C = 2\pi r$ $A = \pi r^2$	
Area of a <b>triangle</b> with base $b$ and height $h$ : $A = \frac{1}{2}bh$	
<p style="text-align: center;">Volume of <b>Prism</b>:  <math>V = \text{area of base} \times \text{height of the prism}</math></p> <p style="text-align: center;">Volume of <b>Pyramid</b>:  <math>V = \frac{1}{3} \times (\text{the volume of the enclosing prism})</math></p> <p style="text-align: center;">Volume of <b>Cylinder</b> with height <math>h</math> and radius <math>r</math>:  <math>V = \pi r^2 h</math></p> <p style="text-align: center;">Volume of <b>Sphere</b> with radius <math>r</math>:  <math>V = \frac{4}{3}\pi r^3</math></p>	<p style="text-align: center;">Surface Area of <b>Cylinder</b> with height <math>h</math> and radius <math>r</math>:  <math>SA = 2\pi rh + 2\pi r^2</math></p> <p style="text-align: center;">Surface Area of a <b>Cone</b> with radius <math>r</math> and slant height <math>h</math>:  <math>SA = \pi rs + \pi r^2</math></p> <p style="text-align: center;">Surface Area of <b>Sphere</b> with radius <math>r</math>:  <math>SA = 4\pi r^2</math></p>