



**SOUTH SHORE REGIONAL SCHOOL BOARD  
CURRICULUM UPDATES & CONTACT INFORMATION**  
Last updated: December 15<sup>th</sup>, 2013

## MATHEMATICS

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### Curriculum Revision

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The P-12 Curriculum is currently under revision. The decision, as of March 2011, is that Nova Scotia will now move forward to adopt the Western and Northern Canadian Protocol (WNCP) math curriculum. For more information on the **WNCP Mathematics** curriculum that we are going to be adopting with minor changes from P-12, visit <http://www.wncp.ca/english/subjectarea/mathematics.aspx>. On the left, click on Mathematics then click directly below on Common Curriculum Framework then K-9 (May 2006) and 10-12 (January 2008) to look at the detailed math curriculums.

The intent is to ensure our curriculum is developmentally appropriate for our students, research-based, and manageable for teachers. A reduction in the number of outcomes at each grade level can ensure teachers take the time required for students to gain a greater depth of understanding. Implementation will begin in 2013-2014, starting with P-3 and Grade 10. Any teacher feedback is appreciated and can be sent to Gaston Comeau or Mark MacLeod.

Grade	Implementation Schedule
<b>P-3</b>	<b>September 2013</b>
<b>4-6</b>	<b>September 2014</b>
<b>7-9</b>	<b>September 2015</b>
<b>10</b>	<b>September 2013</b>
<b>11</b>	<b>September 2014</b>
<b>12</b>	<b>September 2015</b>

# Contacts

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# Curriculum Guides

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If teachers have not yet downloaded the curriculum documents or Learning Outcomes Frameworks, they can be found (not all) in various stages (final, draft, conceptual, ..) on the **EduPortal**.

The DoE are now housing all the curriculum guides/documents in a one-stop place called the **EduPortal**. Check this central place out at <http://edapps.ednet.ns.ca/eduportal> You will need your Employee Number as found on your payroll information to enter the site. Go to Resources and then Educator's Site to access the curriculum documents.

Besides updated curriculum guides, EduPortal also has easy access to other resources and links such as: the On-Line Video Library, upcoming events such as Webinars, Digital Video Library, EBSCO, Ednet Cloud, Education Media Library, Evaluation Services / Provincial Assessment info, FSL Program Services, IB Program, NSVS, NSSBB Online (ALR), ....

There may be old and new draft outcomes both on PowerSchool for subjects like Health P-9, Social Studies 5, etc. It is up to staff and principals to decide where they are in the implementation stage (usually a 3-year implementation for new curriculums). We encourage teachers to use the newer outcomes whenever possible, especially if there are support resources available (i.e. Health P-9).

# INFORMATION ITEMS of Interest

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❖ **MATHEMATICS CONTESTS** Every year in Canada students from grades 2 to 12 have the opportunity to participate in mathematics contests. The main focus of mathematics contests is to stimulate interest in mathematics. These contests are an excellent way to provide students with a challenging and engaging mathematical experience that can be both competitive and educational. The format and structure vary from multiple-choice answers to essay questions to a team competition that emphasizes mathematical writing skills and effective group work. A collection of problems and solutions from previous years can usually be ordered from the sponsor of the contest. Teachers may also find some problems and solutions in databases posted on contest web sites. Using these materials to help students prepare for the contests is an exciting way to support the curriculum and help students to develop problem-solving strategies. Some teachers may prefer to use these contests to supplement classroom work, while others use them with their math clubs. Setting up some problem-solving displays is an effective way to engage students and parents during math fairs, open houses, or curriculum nights. Some contests are scored internally while others provide opportunity for interschool competitions in which students can compare their results with those of other students in the province or other parts of Canada. The contests are also a great tool to challenge our gifted and talented students who may be on an enrichment plan for mathematics. A collection of problems and solutions from previous years can usually be ordered from the sponsor of the contest. Below are some useful web sites and a list of the most popular contests with registration deadlines and competition dates. A link to the Nova Scotia Math Circles is also included.

Website	Annual Mathematics Contests
<a href="http://www.nsmathcircles.com">www.nsmathcircles.com</a>	Nova Scotia Math Circles—evening(s) of mathematical fun while exploring the wonder of numbers
<a href="http://www.cemc.uwaterloo.ca">www.cemc.uwaterloo.ca</a>	Gauss, Pascal, Cayley, Fermat, Fryer, Galois, Hypatia, Euclid, Canadian Senior and Intermediate Mathematics Contests, Canadian Team Mathematics Contest (in schools)
<a href="http://www.mathematicacentrum.ca">www.mathematicacentrum.ca</a>	Thales, Byron-Germain, Fibonacci, Pythagoras, Euler, Lagrange, Newton

<a href="http://www.cms.math.ca/Competitions">www.cms.math.ca/Competitions</a>	Sun Life Financial Canadian Open Math Challenge, Canadian Mathematical Olympiad
<a href="http://www.themathleague.com">www.themathleague.com</a>	The Math League
<a href="http://kangaroo.math.ca">http://kangaroo.math.ca</a>	Canadian Math Kangaroo Contest
<a href="http://purplecomet.org">http://purplecomet.org</a>	Purple Comet! Math Meet—free, on-line, international, team mathematics competition

- ❖ Recommended by the DoE as an engaging on-line math game using problem solving skills to challenge students <http://www.mitacs.ca/outreach/mathamaze>
- ❖ [www.nctm.org](http://www.nctm.org) -check it out for lesson plans, illuminations, latest app recommendations
- ❖ Autograph and SMART Math Tools software are on the school computers at all our high schools, including SSILC. Teachers can also get the software on their personal computer at home-this information was sent out to schools in June 2012.
- ❖ The latest version of Geometer's Sketchpad is 5.04.

# Select a grade and/or category for more curriculum/course support & resources

[Grade Primary](#)

[Grade One](#)

[Grade Two](#)

[Grade Three](#)

[Grade Four](#)

[Grade Five](#)

[Grade Six](#)

[Grade Seven](#)

[Grade Eight](#)

[Grade Nine](#)

[Grade Ten](#)

[Mathematics 10](#)

[Mathematics 10 Plus](#)

[Mathematics Essentials 10](#)

[Mathematics Foundations 10](#)

[Mathematics Foundations 10 Plus](#)

[Grade Eleven](#)

[Mathematics 11](#)

[Advanced Mathematics 11](#)

[Mathematics Essentials 11](#)

[Mathematics Foundations 11](#)

[Grade Twelve](#)

[Mathematics 12](#)

[Advanced Mathematics 12](#)

[Pre-Calculus Mathematics 12](#)

[Calculus 12](#)

[Math for the Workplace 12](#)

[Mathematics Foundations 12](#)

# Grade Primary

*(2013-2014 / Year #1 of Implementation of WNCP curriculum with some adaptations)*

## Provincial Guide

- Mathematics Primary Curriculum Document (May 2013 Draft)
- The Time to Learn Strategy requirement is a minimum of 45 minutes per day for grades P-2, one hour for grades 3-6 and a minimum of 5 minutes per day for mental math and estimation for grades 1-6

## Core Resources

- Math Makes Sense Primary (Pearson)-a classroom resource package which includes a printed Big Book, and a Projectable Big e-book CD; Teacher Resource Guide (print and CD); Primary Audio CD.
- Teachers and students will also have access to Pearson Education's Virtual Manipulatives link. This is a license for 7 years. Implementation Matters is also a web-based support with 10-minute videos that are meant to be viewed in small groups. This will be great way to structure the planned PLC time related to the new mathematics curriculum P to 3.
- Yearly Plan for Mathematics Primary
- Teaching Student-Centered Mathematics K-3 E-Book
- All P-3 classroom teachers now have access (June 2013) to the **Mathematics Learning Commons P-3 Moodle**. Teachers can log in at <http://nsvs.ednet.ns.ca> using the first time enrollment key and their ednet username and password. All P-3 curriculum guides and related support documents listed above and more (i.e. yearly, unit plans, professional learning videos, Origo Videos, Numeracy Nets K-3, Power Point for Curriculum Night, Let's Talk About .. pamphlets, ALR resources,..) are hosted on the Moodle. Teachers received instructions on how to access the Moodle and to enroll in the Mathematics Learning Commons Primary-3. Contact Gaston if you need further assistance.
- SSRSB Supporting Mathematics site. Go to SSRSB website, then Teachers, then Technology Services, username=math, password=math, then Supporting Mathematics. Consult "Reporting in Mathematics, Grades Primary-3" for direction on writing report card comments.

# Grade 1

*(2013-2014 / Year #1 of Implementation of WNCP curriculum with some adaptations)*

## Provincial Guide

- Mathematics 1 Curriculum Document (May 2013 Draft)
- The Time to Learn Strategy requirement is a minimum of 45 minutes per day for grades P-2, one hour for grades 3-6 and a minimum of 5 minutes per day for mental math and estimation for grades 1-6

## Core Resources

- Math Makes Sense Primary (Pearson)-a classroom resource package that includes a printed Big Book, and a Projectable Big e-book; Teacher Resource Guide (print and CD); Student E- Book (print reproducible masters and CD); Grade 1 Audio CD.
- Teachers and students will also have access to Pearson Education’s Virtual Manipulatives link. This is a license for 7 years. Implementation Matters is also a web-based support with 10-minute videos that are meant to be viewed in small groups. This will be great way to structure the planned PLC time related to the new mathematics curriculum P to 3.
- Yearly Plan for Mathematics 1
- Combined 1-2 yearly plan
- Teaching Student-Centered Mathematics K-3 E-Book
- All P-3 classroom teachers now have access (June 2013) to the **Mathematics Learning Commons P-3 Moodle**. Teachers can log in at <http://nsvs.ednet.ns.ca> using the first time enrollment key and their ednet username and password. All P-3 curriculum guides and related support documents listed above and more (i.e. yearly, unit plans, professional learning videos, Origo Videos, Numeracy Nets K-3, Power Point for Curriculum Night, Let’s Talk About .. pamphlets, ALR resources, ..) are hosted on the Moodle. Teachers received instructions on how to access the Moodle and to enroll in the Mathematics Learning Commons Primary-3. Contact Gaston if you need further assistance.
- Mental Math series of 16 short videos which highlights different classrooms and grade levels (1-9) as it demonstrates the various strategies of Mental Math within a curricular context <http://dvl.ednet.ns.ca/mental-math>
- SSRSB Supporting Mathematics site. Go to SSRSB website, then Teachers, then Technology Services, username=math, password=math, then Supporting Mathematics. Consult “Reporting in Mathematics, Grades Primary-3” for direction on writing report card comments.

# Grade 2

*(2013-2014 / Year #1 of Implementation of WNCP curriculum with some adaptations)*

## Provincial Guide

- Mathematics 2 Curriculum Document (May 2013 Draft)
- The Time to Learn Strategy requirement is a minimum of 45 minutes per day for grades P-2, one hour for grades 3-6 and a minimum of 5 minutes per day for mental math and estimation for grades 1-6

## Core Resources

- Math Makes Sense Primary (Pearson)-a classroom resource package that includes a printed Big Book, and a Projectable Big e-book; Teacher Resource Guide (print and CD); Student E- Book (print reproducible masters and CD); Grade 2 Audio CD.
- Teachers and students will also have access to Pearson Education’s Virtual Manipulatives link. This is a license for 7 years. Implementation Matters is also a web-based support with 10-minute videos that are meant to be viewed in small groups. This will be great way to structure the planned PLC time related to the new mathematics curriculum P to 3.
- Yearly Plan for Mathematics 2
- Combined 1-2 & 2-3 yearly plans
- Teaching Student-Centered Mathematics K-3 E-Book
- All P-3 classroom teachers now have access (June 2013) to the **Mathematics Learning Commons P-3 Moodle**. Teachers can log in at <http://nsvs.ednet.ns.ca> using the first time enrollment key and their ednet username and password. All P-3 curriculum guides and related support documents listed above and more (i.e. yearly, unit plans, professional learning videos, Origo Videos, Numeracy Nets K-3, Power Point for Curriculum Night, Let’s Talk About .. pamphlets, ALR resources, ..) are hosted on the Moodle. Teachers received instructions on how to access the Moodle and to enroll in the Mathematics Learning Commons Primary-3. Contact Gaston if you need further assistance.
- Mental Math series of 16 short videos which highlights different classrooms and grade levels (1-9) as it demonstrates the various strategies of Mental Math within a curricular context <http://dvl.ednet.ns.ca/mental-math>
- SSRSB Supporting Mathematics site. Go to SSRSB website, then Teachers, then Technology Services, username=math, password=math, then Supporting Mathematics. Consult “Reporting in Mathematics, Grades Primary-3” for direction on writing report card comments.



# Grade 3

*(2013-2014 / Year #1 of Implementation of WNCP curriculum with some adaptations)*

## Provincial Guide

- Mathematics 3 Curriculum Document (May 2013 Draft)
- The Time to Learn Strategy requirement is a minimum of 45 minutes per day for grades P-2, one hour for grades 3-6 and a minimum of 5 minutes per day for mental math and estimation for grades 1-6

## Core Resources

- Math Makes Sense 3 Teacher ProGuide (print and CD)
- Math Makes Sense 3 Student Edition (print)
- Math Makes Sense 3 Student e-Text
- Teachers and students will also have access to Pearson Education's Virtual Manipulatives link. This is a license for 7 years. Implementation Matters is also a web-based support with 10-minute videos that are meant to be viewed in small groups. This will be great way to structure the planned PLC time related to the new mathematics curriculum P to 3.
- Yearly Plan for Mathematics 3
- Combined 2-3 yearly plan
- Teaching Student-Centered Mathematics K-3 E-Book
- Teaching Student-Centered Mathematics 3-5 E-Book
- All P-3 classroom teachers now have access (June 2013) to the **Mathematics Learning Commons P-3 Moodle**. Teachers can log in at <http://nsvs.ednet.ns.ca> using the first time enrollment key and their ednet username and password. All P-3 curriculum guides and related support documents listed above and more (i.e. yearly, unit plans, professional learning videos, Origo Videos, Numeracy Nets K-3, Power Point for Curriculum Night, Let's Talk About .. pamphlets, ALR resources, .. ) are hosted on the Moodle. Teachers received instructions on how to access the Moodle and to enroll in the Mathematics Learning Commons Primary-3. Contact Gaston if you need further assistance.
- Leaps and Bounds Student and Teacher Resource-this resource was distributed to each teacher in CD format in April, 2013
- Mental Math series of 16 short videos which highlights different classrooms and grade levels (1-9) as it demonstrates the various strategies of Mental Math within a curricular context <http://dvl.ednet.ns.ca/mental-math>
- SSRSB Supporting Mathematics site. Go to SSRSB website, then Teachers, then Technology Services, username=math, password=math, then Supporting Mathematics. Consult "Reporting in Mathematics, Grades Primary-3" for direction on writing report card comments.



## Grade 4

*The new Grade 4 WNCP curriculum will begin implementation in 2014-2015. Teachers received Common Messaging PD in Sept 2013 and will receive further PD in the Spring of 2014.*

### Provincial Guide

- Atlantic Canada Mathematics Curriculum: Grades 4-6 (1999)
- The Time to Learn Strategy requirement is a minimum of 45 minutes per day for grades P-2, one hour for grades 3-6 and a minimum of 5 minutes per day for mental math and estimation for grades 1-6

### Core Resources

- Math Makes Sense Student Text Books & Teaching Guides –Grade 4
- Mathematics Grade 4: “A Teaching Resource” to supplement the Guide with suggested yearly plans (2008)
- Mathematics 4: A Support Resource (Draft, September 2008)
- Mental Math in Mathematics 4 (Draft, December 2008)
- Mental Math series of 16 short videos which highlights different classrooms and grade levels (1-9) as it demonstrates the various strategies of Mental Math within a curricular context <http://dvl.ednet.ns.ca/mental-math>
- Check out Census at School, an international Web-based classroom activity for students, at [www.censusatschool.ca](http://www.censusatschool.ca) Ties in nicely with the Data Management outcomes. Even more Statistics Canada learning resources at [www.statcan.gc.ca/learningresources](http://www.statcan.gc.ca/learningresources) for mathematics and other subjects.
- Grade 4 Math Assessment resources <http://plans.ednet.ns.ca/grade4> September 23-October 4, 2013.

## Grade 5

*The new Grade 5 WNCP curriculum will begin implementation in 2014-2015. Teachers received Common Messaging PD in Sept 2013 and will receive further PD in the Spring of 2014.*

### Provincial Guide

- Atlantic Canada Mathematics Curriculum: Grades 4-6 (1999)
- The Time to Learn Strategy requirement is a minimum of 45 minutes per day for grades P-2, one hour for grades 3-6 and a minimum of 5 minutes per day for mental math and estimation for grades 1-6

### Core Resources

- Math Makes Sense Student Text Books & Teaching Guides –Grade 5
- Mathematics Grade 5: “A Teaching Resource” to supplement the Guide with suggested yearly plans (2006)
- Mathematics 5: A Support Resource (Draft, September 2008)
- Mental Math in Mathematics 5 (Draft, December 2008)
- Mental Math series of 16 short videos which highlights different classrooms and grade levels (1-9) as it demonstrates the various strategies of Mental Math within a curricular context <http://dvl.ednet.ns.ca/mental-math>
- Check out Census at School, an international Web-based classroom activity for students, at [www.censusatschool.ca](http://www.censusatschool.ca) Ties in nicely with the Data Management outcomes. Even more Statistics Canada learning resources at [www.statcan.gc.ca/learningresources](http://www.statcan.gc.ca/learningresources) for mathematics and other subjects.

## Grade 6

*The new Grade 6 WNCP curriculum will begin implementation in 2014-2015. Teachers received Common Messaging PD in Sept 2013 and will receive further PD in the Spring of 2014.*

### Provincial Guide

- Atlantic Canada Mathematics Curriculum: Grades 4-6 (1999)
- The Time to Learn Strategy requirement is a minimum of 45 minutes per day for grades P-2, one hour for grades 3-6 and a minimum of 5 minutes per day for mental math and estimation for grades 1-6

### Core Resources

- Math Makes Sense Student Text Books & Teaching Guides –Grade 6
- Mathematics 6 Curriculum Project (2004/Mark MacLeod)
- Mathematics Grade 6: “A Teaching Resource” to supplement the Guide with suggested yearly plans (2010)
- Mathematics 6: A Support Resource (Draft, September 2009)
- Mental Math in Mathematics 6 (Draft, December 2008)
- Mental Math series of 16 short videos which highlights different classrooms and grade levels (1-9) as it demonstrates the various strategies of Mental Math within a curricular context <http://dvl.ednet.ns.ca/mental-math>
- Check out Census at School, an international Web-based classroom activity for students, at [www.censusatschool.ca](http://www.censusatschool.ca) Ties in nicely with the Data Management outcomes. Even more Statistics Canada learning resources at [www.statcan.gc.ca/learningresources](http://www.statcan.gc.ca/learningresources) for mathematics and other subjects.
- Grade 6 Math Assessment resources <http://plans.ednet.ns.ca/grade6> Sept 32-Oct 4, 2013. Check out the Assessment Archive for resources such as the 2009-2010 “What We Have Learned” document and find out which outcomes students struggle with along with the 2010-2011 EMLA Common Errors.

# Grade 7

*The new Grade 7 WNCP curriculum will begin implementation in 2015-2016.*

## Provincial Guide

- Atlantic Canada Mathematics Curriculum: Grade 7 (1999)
- The Time to Learn Strategy requires a minimum of 60 minutes per day for grade 7

## Core Resources

- A Moodle now exists for teachers to access for Mathematics 7-9. Go to <http://nsvs.ednet.ns.ca> and use your staff ednet (tsmith portion) and your password then go to top menu and click on Educators then drop down and click on Professional Learning then drop down and click on Provincial Teacher Communities of Practice then click on Mathematics and then click Mathematics Learning Commons 7-9. Enrollment key is *math789* (use just once). Once you have been in to the site once, the next time you log in, you can just go to My Courses on the left and click on Mathematics Learning Commons 7-9 and away you go!
- This one-stop shopping Grade 7-9 Math Moodle contains access to the following resources: Math Curriculum Guides, the “A Teaching Resource” documents, Yearly Plans, Videos, assessment materials, Mental Math Booklets, Item Bank, EEMLA and EMLA, recommended ALR resources, Home-School Communication: Grades 7-9 Resource, and even a Forum to chat with other math teachers along with a variety of other links.
- Math 7: Focus on Understanding (Student Text & TR)-100% match to SCO’s
- Mathematics Grade 7: “A Teaching Resource” to supplement the Guide with suggested yearly plans (2005; revised and reprinted 2010)
- Looking for quality assessment items for tests, quizzes, student discussions, etc. Check out the Grades 7-12 Item Bank at <http://itembank.ednet.ns.ca>. A Login ID and Password are required to access this site. You can obtain this from the Department of Education, at 424-4258 or by emailing [itembank@gov.ns.ca](mailto:itembank@gov.ns.ca).
- Sharon McCready, Mathematics Support Consultant in the English Program Services Division, is currently collaborating with staff of Learning Resources & Technology Services in the post-production work towards a new teacher professional development video series for teachers of mathematics in grades 7 to 9. Ten segments are in preparation, each on a different theme: Accommodating Students; Activating Prior Knowledge; Assessment; Classroom Management; Communicating with Parents; Language; Manipulatives; Mental Math; Preparation and Planning; and Teaching Tactics. Each video will present best practices from a contributing team of Math teachers from across Nova Scotia, from Digby to Sydney, through both interviews and live, unrehearsed sequences from actual classes—at all three of

the focus grade levels. Together, the segments will form a comprehensive professional development resource for teachers that can be used by Board and school staff whenever and wherever the need arises. The series will be available in October 2012 as both a conventional DVD set, distributed from the LRTS Media Library, and online as part of the LRTS Digital Video Library (<http://dvl.ednet.ns.ca>). The series will join the award-winning resource, Mental Math, as a practical support for Nova Scotia Math teachers.

- Mental Math series of 16 short videos which highlights different classrooms and grade levels (1-9) as it demonstrates the various strategies of Mental Math within a curricular context <http://dvl.ednet.ns.ca/mental-math>
- Check out Census at School, an international Web-based classroom activity for students, at [www.censusatschool.ca](http://www.censusatschool.ca) Ties in nicely with the Data Management outcomes. Even more Statistics Canada learning resources at [www.statcan.gc.ca/learningresources](http://www.statcan.gc.ca/learningresources) for mathematics and other subjects.

# Grade 8

*The new Grade 8 WNCP curriculum will begin implementation in 2015-2016.*

## Provincial Guide

- Atlantic Canada Mathematics Curriculum: Grade 8 (1999)
- The Time to Learn Strategy requires a minimum of 60 minutes per day for grade 8

## Core Resources

- A Moodle now exists for teachers to access for Mathematics 7-9. Go to <http://nsvs.ednet.ns.ca> and use your staff ednet (tsmith portion) and your password then go to top menu and click on Educators then drop down and click on Professional Learning then drop down and click on Provincial Teacher Communities of Practice then click on Mathematics and then click Mathematics Learning Commons 7-9. Enrollment key is *math789* (use just once). Once you have been in to the site once, the next time you log in, you can just go to My Courses on the left and click on Mathematics Learning Commons 7-9 and away you go!
- This one-stop shopping Grade 7-9 Math Moodle contains access to the following resources: Math Curriculum Guides, the “A Teaching Resource” documents, Yearly Plans, Videos, assessment materials, Mental Math Booklets, Item Bank, link to Provincial Assessments/resources, recommended ALR resources, Home-School Communication: Grades 7-9 Resource, and even a Forum to chat with other math teachers along with a variety of other links.
- Math 8: Focus on Understanding (Student Text & TR)-100% match to SCO’s
- Mathematics Grade 8: “A Teaching Resource” to supplement the Guide with suggested yearly plans (2005)
- Looking for quality assessment items for tests, quizzes, student discussions, etc. Check out the Grades 7-12 Item Bank at <http://itembank.ednet.ns.ca>. A Login ID and Password are required to access this site. You can obtain this from the Department of Education, at 424-4258 or by emailing [itembank@gov.ns.ca](mailto:itembank@gov.ns.ca).
- Sharon McCready, Mathematics Support Consultant in the English Program Services Division, is currently collaborating with staff of Learning Resources & Technology Services in the post-production work towards a new teacher professional development video series for teachers of mathematics in grades 7 to 9. Ten segments are in preparation, each on a different theme: Accommodating Students; Activating Prior Knowledge; Assessment; Classroom Management; Communicating with Parents; Language; Manipulatives; Mental Math; Preparation and Planning; and Teaching Tactics. Each video will present best practices from a contributing team of Math teachers from across Nova Scotia, from Digby to Sydney, through both



interviews and live, unrehearsed sequences from actual classes—at all three of the focus grade levels. Together, the segments will form a comprehensive professional development resource for teachers that can be used by Board and school staff whenever and wherever the need arises. The series will be available in October 2012 as both a conventional DVD set, distributed from the LRTS Media Library, and online as part of the LRTS Digital Video Library (<http://dvl.ednet.ns.ca>). The series will join the award-winning resource, Mental Math, as a practical support for Nova Scotia Math teachers.

- Mental Math series of 16 short videos which highlights different classrooms and grade levels (1-9) as it demonstrates the various strategies of Mental Math within a curricular context <http://dvl.ednet.ns.ca/mental-math>
- Each teacher that attended the Math 8 workshop on Thursday, September 22<sup>nd</sup>, 2011 received a USB memory stick with all the Grade 8 Math support materials, including 4 sample yearly plans, and documents that are required for Grade 8 Math—extra copies are available through Mark.
- The DoE completed the process of developing material for the Grade 8 Mathematics Assessment. The assessment items were developed by current math teachers, reviewed by an Advisory group (Sharon Knickle from HA and Kendra Hall from BHS were our members of the team) and were field-tested in early October 2011. The assessment will be comprised of mostly multiple-choice items and may include some open-ended questions where students will bubble in their answer. Determination of question format will be made after the field test. A release of practice items in all question formats was made available early in 2012. Items were developed based on the Nova Scotia Grade 7 and 8 Mathematics Curriculum Guide and the Grade 8 Mathematics Resource: Focus on Understanding. The Table of Specifications is as follows: GCO's A & B / Number = 35-40%; GCO B / Patterns & Relations = 15-20%; GCO D / Measurement = 15-20%; GCO E / Geometry = 15-20%; GCO F / Data Management = 5-10%; GCO G / Probability = 5%.
- On Friday, March 2<sup>nd</sup>, 2012, all teachers who teach Grade 8 Mathematics, including teachers who teach Grade 8 Mathematics en Français (BHS, SQ's, HA), were invited to attend a PD session focusing solely on the new Grade 8 Mathematics Assessment which will be written for the 1<sup>st</sup> time on June 5-6, 2012 in our schools. The workshop looked at the process/table of specifications; level of questions; exemplars/sample mock questions; field tested questions; areas of difficulty concluded from the field-tested questions; and a Q & A all in relation to the new Grade 8 Mathematics Assessment. Marthe Craig (DoE Evaluation Services), along with Mark MacLeod and Gaston Comeau provided the In-service.
- RWM Grade 8 Math Assessment resources <http://plans.ednet.ns.ca/grade8> May 26-June 6, 2014.
- Check out Census at School, an international Web-based classroom activity for students, at [www.censusatschool.ca](http://www.censusatschool.ca) Ties in nicely with the Data Management outcomes. Even more Statistics Canada learning resources at [www.statcan.gc.ca/learningresources](http://www.statcan.gc.ca/learningresources) for mathematics and other subjects.

## Grade 9

***The new Grade 9 WNCP curriculum will begin implementation in 2015-2016.***

\*\*Mark met with Grade 9 teachers, GC's and Admin during January 2013 to discuss the effects that the new Grade 10 Math courses will have on the current **Grade 9 Mathematics** course in terms of SCO's and placement into Grade 10 Math courses.

### **Grade 9 Atlantic Canada Mathematics Outcomes Document -correlated to Grade 10 Mathematics courses to be offered beginning in 2013-2014**

This document/chart identifies which grade 9 mathematics outcomes will prepare students for the indicated grade 10 mathematics course. Grade 9 teachers will find this chart helpful in reducing the SCO's that need to be addressed in the current Grade 9 curriculum (min 16 less SCO's) and in advising students about which grade 10 mathematics course is best suited for them.

#### **Provincial Guide**

- Atlantic Canada Mathematics Curriculum: Grade 9 (2000)
- The Time to Learn Strategy requires a minimum of 60 minutes per day for grade 9

#### **Core Resources**

- A Moodle now exists for teachers to access for Mathematics 7-9. Go to <http://nsvs.ednet.ns.ca> and use your staff ednet (tsmith portion) and your password then go to top menu and click on Educators then drop down and click on Professional Learning then drop down and click on Provincial Teacher Communities of Practice then click on Mathematics and then click Mathematics Learning Commons 7-9. Enrollment key is **math789** (*use just once*). Once you have been in to the site once, the next time you log in, you can just go to My Courses on the left and click on Mathematics Learning Commons 7-9 and away you go!
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- Math 9: Focus on Understanding (Student Text & TR)-100% match to SCO's
- Mathematics Grade 9: "A Teaching Resource" to supplement the Guide with suggested yearly plans (2005)

- Looking for quality assessment items for tests, quizzes, student discussions, etc. Check out the Grades 7-12 Item Bank at <http://itembank.ednet.ns.ca>. A Login ID and Password are required to access this site. You can obtain this from the Department of Education, at 424-4258 or by emailing [itembank@gov.ns.ca](mailto:itembank@gov.ns.ca).
- Sharon McCready, Mathematics Support Consultant in the English Program Services Division, is currently collaborating with staff of Learning Resources & Technology Services in the post-production work towards a new teacher professional development video series for teachers of mathematics in grades 7 to 9. Ten segments are in preparation, each on a different theme: Accommodating Students; Activating Prior Knowledge; Assessment; Classroom Management; Communicating with Parents; Language; Manipulatives; Mental Math; Preparation and Planning; and Teaching Tactics. Each video will present best practices from a contributing team of Math teachers from across Nova Scotia, from Digby to Sydney, through both interviews and live, unrehearsed sequences from actual classes—at all three of the focus grade levels. Together, the segments will form a comprehensive professional development resource for teachers that can be used by Board and school staff whenever and wherever the need arises. The series will be available in October 2012 as both a conventional DVD set, distributed from the LRTS Media Library, and online as part of the LRTS Digital Video Library (<http://dvl.ednet.ns.ca>). The series will join the award-winning resource, Mental Math, as a practical support for Nova Scotia Math teachers.
- Mental Math series of 16 short videos which highlights different classrooms and grade levels (1-9) as it demonstrates the various strategies of Mental Math within a curricular context <http://dvl.ednet.ns.ca/mental-math>
- Each grade 9 Mathematics classroom received a class set of Alge-tiles (March 2011)
- Our High School Math Advisory group, met on Wednesday, March 23<sup>rd</sup>, 2011, and developed a Placement Document that will help in our students choosing high school math courses that they can be successful in consultation with their teacher, Guidance Counselor and parents. These documents were being used beginning in the 2011-2012 school year.
- Check out Census at School, an international Web-based classroom activity for students, at [www.censusatschool.ca](http://www.censusatschool.ca) Ties in nicely with the Data Management outcomes. Even more Statistics Canada learning resources at [www.statcan.gc.ca/learningresources](http://www.statcan.gc.ca/learningresources) for mathematics and other subjects.

# Grade 10

*(2013-2014 / Year #1 of Implementation of WNCP curriculum with some adaptations for Mathematics 10 and Mathematics at Work 10)*

**Senior High Mathematics: Common Pathways** A diagram that illustrates likely course pathways for senior high mathematics. Grade 10 courses will be implemented in 2013-2014, grade 11 courses in 2014-2015, and grade 12 courses in 2015-2016. The Mathematics Essentials pathway, which is currently available as part of the Public School Programs, will continue.

## **Mathematics 10 (Academic) MT10**

(BJSHS, FHCS, LRHS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Mathematics 9 and demonstrated good to excellent performance in relation to the expected learning outcomes prescribed for Mathematics 9.

**The new Mathematics 10 course will be a 220-hour year-long academic course. Successful completion will result in two mathematics credits—one of these is an eligible credit for the two mathematics credits required for graduation. The other credit is an eligible credit for the “two others from mathematics, science, and/or technology.**

### **Provincial Guide**

- Mathematics 10 Curriculum Document (2012)
- An IPP code refers to the grade level at which the student requires an IPP for mathematics, not to the specific classroom in which a student who requires an IPP is placed.

### **Core Resources**

- Teacher Technology Resource (DvD)-includes the Teacher Resource
- Mathematics 10 Student Edition (print)-Pearson
- Mathematics 10 Student Web-based e-Book-Pearson
- Extra Practice & Exam view Test Generator (CD)-Pearson
- Solutions (CD)-complete solutions to questions found in the Student Edition-Pearson
- Financial Mathematics Student Edition (print and PDF files)-McGraw Hill
- Financial Mathematics Teacher Resource (print and CD)-McGraw Hill
- Yearly Plan
- All of the above plus more (Assessment, Multi-Media tutorials, Power Point for Curriculum Night, ALR resources, ..) may also be accessed through the Mathematics Learning Commons Grade 10 Moodle. Teachers received instructions on how to access the Moodle and to enroll in the Mathematics Learning Commons Grade 10. Contact Mark if you need further assistance.
- The **Ednet Cloud**, file repository that was set up for the Grade 10 Math teachers to use will remain TBA. The DoE will keep the Cloud open for

several months, giving teachers a chance to migrate from the Ednet Cloud to the Grade 10 Mathematics Moodle, when it opens up in mid September 2013. The link to access those files (i.e. curriculum guide, Yearly Plan, Intro Problem Solving Week, ..) on the Ednet Cloud is: (Mark also sent the majority of these files out electronically after the June 2013 workshop)

<https://ourcloud.nspes.ca/public.php?sce=files&t=2c2cb888152b7b00c249235a5840cd4b>

Go to the **Read Me First file**, which will give you a listing of the core resources available for Mathematics 10 or Math at Work 10. This Read Me First file will also give you the steps needed to access the Grade 10 Mathematics Learning Commons Moodle for when you decide to go there-the Moodle will contain more information than you will ever need.

- The DoE have listed a supplementary resource from McGraw Hill for Mathematics 10 entitled Mathematics 10 Enriched. This resource is available for purchase through the NS ALR / book bureau. This is not a core resource, but is a supplementary resource intended to enhance the 220-hour course for students who would like additional enriched learning. Attached both the link to the student and teacher resources and the information to the ALR <http://www.mcgrawhill.ca/school/explore/1259021998/western+canadian+mathematics+10+enriched/>
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
- Our High School Math Advisory group, met on Wednesday, March 23<sup>rd</sup>, 2011, and developed a Placement Document that will help in our students choosing high school math courses that they can be successful in consultation with their teacher, Guidance Counselor and parents. These documents were being used beginning in the 2011-2012 school year.
- David Pilmer has developed a series of Mathematics 49 videos for the NSCC Adult Learning Program (ALP). Topics include Sinusoidal Functions, Quadratic Functions, Systems of Equations and more. To view the videos visit the website <http://www.youtube.com/watch?v=eaG4px5o5vs>
- NSE resources <http://plans.ednet.ns.ca/m10m10w> June 19<sup>th</sup>, 2014.

**Mathematics at Work 10 (Academic) MTW10**  
(BJSHS, FHCS, LRHS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Mathematics 9 and demonstrated good to excellent performance in relation to the expected learning outcomes prescribed for Mathematics 9.

**The new Mathematics at Work 10 course will be a 110-hour course. Successful completion will result on one graduation credit, eligible for the mathematics graduation requirement.**

### **Provincial Guide**

- Mathematics at Work 10 Curriculum Document (2012)
- An IPP code refers to the grade level at which the student requires an IPP for mathematics, not to the specific classroom in which a student who requires an IPP is placed.

### **Core Resources**

- Mathematics at Work Student Edition (print and PDF files)
- Mathematics at Work Teacher Edition (print and CD)
- Exercise and Homework Book (print)
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
- Our High School Math Advisory group, met on Wednesday, March 23<sup>rd</sup>, 2011, and developed a Placement Document that will help in our students choosing high school math courses that they can be successful in consultation with their teacher, Guidance Counselor and parents. These documents were being used beginning in the 2011-2012 school year.
- David Pilmer has developed a series of Mathematics 49 videos for the NSCC Adult Learning Program (ALP). Topics include Sinusoidal Functions, Quadratic Functions, Systems of Equations and more. To view the videos visit the website <http://www.youtube.com/watch?v=eaG4px5o5vs>
- NSE resources <http://plans.ednet.ns.ca/m10m10w> January 28<sup>th</sup>, 2014; June 19<sup>th</sup>, 2014.

## **Mathematics Essentials 10 (Grad) MTHE10**

(BJSHS, (FHCS, LRHS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Math 8 and recommendation from their Mathematics 9 teacher

### **Provincial Guide**

- Mathematics Essentials 10 (Draft 2005)

### **Core Resources**

- Mathematics for Everyday Life 10 Student Text / Teacher's Resource
- The City - an exciting resource for teaching financial management. Check it out at <http://www.themoneybelt.gc.ca>. Mark MacLeod and Jeff Rhodenizer (BHS) have been trained using this resource.
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
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- Looking for quality assessment items for tests, quizzes, student discussions, etc. Check out the Grades 7-12 Item Bank at <http://itembank.ednet.ns.ca>. A Login ID and Password are required to access this site. You can obtain this from the Department of Education, at 424-4258 or by emailing [itembank@gov.ns.ca](mailto:itembank@gov.ns.ca).

# Grade 11

*The new Grade 11 WNCP curriculums for Mathematics at Work 11, Mathematics 11 and Pre-Calculus 11 will begin implementation in 2014-2015. Teachers will receive PD in the Spring of 2014.*

## **Mathematics 11 (Academic) MTH11**

(BJSHS, FHCS, LRHS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Mathematics 10

### **Provincial Guide**

- Atlantic Canada Mathematics Curriculum: Mathematics 11 / Advanced Mathematics 11 (Implementation Draft 2000)
- IPP code is MTH11IP / 008109. The code refers to the grade level at which the student requires an IPP for mathematics, not to the specific classroom in which a student who requires an IPP is placed.

### **Core Resources**

- Mathematical Modeling: Book 2 (2004). Student Text and TR. Only CD copies of the texts Mathematical Modeling, Book 1 (Mathematics 10) and Mathematical Modeling, Book 2 (Mathematics 11 and Advanced Mathematics 11) are now available for purchase from the ALR and not the text itself.
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
- Our High School Math Advisory group, met on Wednesday, March 23<sup>rd</sup>, 2011, and developed a Placement Document that will help in our students choosing high school math courses that they can be successful in consultation with their teacher, Guidance Counselor and parents. These documents were being used beginning in the 2011-2012 school year.
- David Pilmer has developed a series of Mathematics 49 videos for the NSCC Adult Learning Program (ALP). Topics include Sinusoidal Functions, Quadratic Functions, Systems of Equations and more. To view the videos visit the website <http://www.youtube.com/watch?v=eaG4px5o5vs>
- Looking for quality assessment items for tests, quizzes, student discussions, etc. Check out the Grades 7-12 Item Bank at <http://itembank.ednet.ns.ca>. A Login ID and Password are required to access this site. You can obtain this from the Department of Education, at 424-4258 or by emailing [itembank@gov.ns.ca](mailto:itembank@gov.ns.ca).
- Student Workbooks for the APEF Mathematics curriculum of Math 10, 11, and 12 from a teacher in NFLD is a resource available to our high school math teachers. The workbooks contain hundreds of fully worked examples and over 1500 practice exercises. Check it out at <http://www.sharpemathematics.com>



## **Advanced Mathematics 11 (Adv) MTH11AD**

(BJSHS, FHCS, LRHS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Mathematics 10 and have outstanding performance in relation to the learning outcomes prescribed for Mathematics 10.

### **Provincial Guide**

- Atlantic Canada Mathematics Curriculum: Mathematics 11 / Advanced Mathematics 11 (Draft 2000)

### **Core Resources**

- Mathematical Modeling: Book 2 (2004). Student Text and TR. Only CD copies of the texts Mathematical Modeling, Book 1 (Mathematics 10) and Mathematical Modeling, Book 2 (Mathematics 11 and Advanced Mathematics 11) are now available for purchase from the ALR and not the text itself.
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
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- David Pilmer has developed a series of Mathematics 49 videos for the NSCC Adult Learning Program (ALP). Topics include Sinusoidal Functions, Quadratic Functions, Systems of Equations and more. To view the videos visit the website <http://www.youtube.com/watch?v=eaG4px5o5vs>
- Looking for quality assessment items for tests, quizzes, student discussions, etc. Check out the Grades 7-12 Item Bank at <http://itembank.ednet.ns.ca>. A Login ID and Password are required to access this site. You can obtain this from the Department of Education, at 424-4258 or by emailing [itembank@gov.ns.ca](mailto:itembank@gov.ns.ca).
- Student Workbooks for the APEF Mathematics curriculum of Math 10, 11, and 12 from a teacher in NFLD is a resource available to our high school math teachers. The workbooks contain hundreds of fully worked examples and over 1500 practice exercises. Check it out at <http://www.sharpemathematics.com>

## **Mathematics Essentials 11 (Grad) MTHE11**

(BJSHS, FHCS, LRHS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Mathematics Essentials 10

### **Provincial Guide**

- Mathematics Essentials 11 (Draft November 2006)

### **Core Resources**

- Mathematics for Everyday Life 11 Student Text / Teacher's Resource
- Mathematics for Everyday Life 12 Student Text / Teacher's Resource
- The City - an exciting resource for teaching financial management. Check it out at <http://www.themoneybelt.gc.ca>. Mark MacLeod and Jeff Rhodenizer (BHS) have been trained using this resource.
- Item Bank
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
- Our High School Math Advisory group, met on Wednesday, March 23<sup>rd</sup>, 2011, and developed a Placement Document that will help in our students choosing high school math courses that they can be successful in consultation with their teacher, Guidance Counselor and parents. These documents were being used beginning in the 2011-2012 school year.
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## **Mathematics Foundations 11 (Grad) MTH11F**

(FHCS, LRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Mathematics Foundations 10 or Mathematics 10

### **Provincial Guide**

- Atlantic Canada Mathematics Curriculum: Mathematics Foundations 11 (Implementation Draft 2000)

### **Core Resources**

- Constructing Mathematics: Book 2 (2000) Student Text / Teacher's Resource
- The City - an exciting resource for teaching financial management. Check it out at <http://www.themoneybelt.gc.ca>. Mark MacLeod and Jeff Rhodenizer (BHS) have been trained using this resource.
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
- Our High School Math Advisory group, met on Wednesday, March 23<sup>rd</sup>, 2011, and developed a Placement Document that will help in our students choosing high school math courses that they can be successful in consultation with their teacher, Guidance Counselor and parents. These documents were being used beginning in the 2011-2012 school year.
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# Grade 12

*The new Grade 12 WNCP curriculums will begin implementation in 2015-2016.*

## **Mathematics 12 (Acad) MTH12**

(BJSHS, FHCS, LRHS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Mathematics 10

**Recommended Prerequisite:** Successful completion of Mathematics 11

### **Provincial Guide**

- Atlantic Canada Mathematics Curriculum: Mathematics 12 / Advanced Mathematics 12 (2004)
- IPP code is MTH12IP / 008110. The code refers to the grade level at which the student requires an IPP for mathematics, not to the specific classroom in which a student who requires an IPP is placed.

### **Core Resources**

- Mathematical Modeling: Book 3 (2001) Student Text / Teacher's Resource. This is to advise that the department is not investing in further production of Mathematical Modeling, Book 3 (Stock Code: #22846), the textbook for Mathematics 12 and Advanced Mathematics 12. There seems hardly any demand for the text this year and little anticipated in the two years thereafter. The DoE shall be providing new resources to support the implementation of new grade 12 mathematics courses in September 2015. Given declining enrolment, you may wish to collect surplus copies that are no longer needed in your schools for redistribution in other schools if necessary over the next three years.
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
- The 2012-2013 school year will be the last year that the Grade 12 Math NSE's will be written. The DoE will provide schools with a electronic copy of the assessment. We will leave it up to our schools to use the entire DoE assessment or parts of it and will administer on their own and mark as they do all their school exams. The NSE's will move to Grade 10 effective 2013-14.
- Our High School Math Advisory group, met on Wednesday, March 23<sup>rd</sup>, 2011, and developed a Placement Document that will help in our students choosing high school math courses that they can be successful in consultation with their teacher, Guidance Counselor and parents. These documents were being used beginning in the 2011-2012 school year.

- David Pilmer has developed a series of Mathematics 49 videos for the NSCC Adult Learning Program (ALP). Topics include Sinusoidal Functions, Quadratic Functions, Systems of Equations and more. To view the videos visit the website <http://www.youtube.com/watch?v=eaG4px5o5vs>
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- Student Workbooks for the APEF Mathematics curriculum of Math 10, 11, and 12 from a teacher in NFLD is a resource available to our high school math teachers. The workbooks contain hundreds of fully worked examples and over 1500 practice exercises. Check it out at <http://www.sharpemathematics.com>

## **Advanced Mathematics 12 (Adv) MTH12AD**

(BJSHS, FHCS, LRHS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Mathematics 10 and have demonstrated outstanding performance in relation to the learning outcomes prescribed for Mathematics 10

**Recommended Prerequisite:** Successful completion of Advanced Mathematics 11

### **Provincial Guide**

- Atlantic Canada Mathematics Curriculum: Mathematics 12 / Advanced Mathematics 12 (2004)

### **Core Resources**

- Mathematical Modeling: Book 3 (2001) Student Text / Teacher's Resource. This is to advise that the department is not investing in further production of Mathematical Modeling, Book 3 (Stock Code: #22846), the textbook for Mathematics 12 and Advanced Mathematics 12. There seems hardly any demand for the text this year and little anticipated in the two years thereafter. The DoE shall be providing new resources to support the implementation of new grade 12 mathematics courses in September 2015. Given declining enrolment, you may wish to collect surplus copies that are no longer needed in your schools for redistribution in other schools if necessary over the next three years.
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
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- Looking for quality assessment items for tests, quizzes, student discussions, etc. Check out the Grades 7-12 Item Bank at <http://itembank.ednet.ns.ca>. A Login ID and Password are required to access this site. You can obtain this

from the Department of Education, at 424-4258 or by emailing [itembank@gov.ns.ca](mailto:itembank@gov.ns.ca).

- Student Workbooks for the APEF Mathematics curriculum of Math 10, 11, and 12 from a teacher in NFLD is a resource available to our high school math teachers. The workbooks contain hundreds of fully worked examples and over 1500 practice exercises. Check it out at <http://www.sharpemathematics.com>

### **Pre-Calculus Mathematics 12 (Adv) PCAL12** (BJSHS, FHCS, LRHS, NQRHS, NGRHS, PVEC)

**Prerequisite:** Successful completion of Advanced Mathematics 11 and Advanced Mathematics 12 *or* Successful completion of Mathematics 11 and Mathematics 12 and have demonstrated very good to outstanding performance in relation to the learning outcomes prescribed for Mathematics 11 and Mathematics 12

#### **Provincial Guide**

- Atlantic Canada Mathematics Curriculum: Pre-Calculus Mathematics 12 / (Implementation Draft 2002)

#### **Core Resources**

- Mathematical Modeling: Book 4 (2002) Student Text / Teacher's Resource
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
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- Looking for quality assessment items for tests, quizzes, student discussions, etc. Check out the Grades 7-12 Item Bank at <http://itembank.ednet.ns.ca>. A Login ID and Password are required to access this site. You can obtain this from the Department of Education, at 424-4258 or by emailing [itembank@gov.ns.ca](mailto:itembank@gov.ns.ca).

## **Calculus 12 (Adv) CAL12**

(LRHS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Pre-Calculus Mathematics 12

### **Provincial Guide**

- Calculus 12 (Implementation Draft, December 2004)

### **Core Resources**

- [Calculus](#): Graphical, Numerical & Algebraic Student Text / Teacher's Resource
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
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- David Pilmer has developed a series of Mathematics 49 videos for the NSCC Adult Learning Program (ALP). Topics include Sinusoidal Functions, Quadratic Functions, Systems of Equations and more. To view the videos visit the website <http://www.youtube.com/watch?v=eaG4px5o5vs>
- Looking for quality assessment items for tests, quizzes, student discussions, etc. Check out the Grades 7-12 Item Bank at <http://itembank.ednet.ns.ca>. A Login ID and Password are required to access this site. You can obtain this from the Department of Education, at 424-4258 or by emailing [itembank@gov.ns.ca](mailto:itembank@gov.ns.ca).



## **Math for the Workplace 12 (Grad) MWP12**

(BJSHS, FHCS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of one mathematics course at the grade 10 level and one mathematics course at the grades 11 or 12 level

### **Provincial Guide**

- Math for the Workplace 12 (Draft, Nov 2007)
- plans to develop and pilot Business Math module (2011-2012), implement (2012-2013)
- This credit can not be used as one of the two required math credits but can be used as one of the credits for the additional two credits needed for the compulsory math/science/technology area.

### **Core Resources**

- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
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## **Mathematics Foundations 12 (Grad) MTH12FND**

(LRHS, NGRHS, NQRHS, PVEC)

**Prerequisite:** Successful completion of Mathematics Foundations 10 or Mathematics 10

**Recommended Prerequisite:** Successful completion of Mathematics Foundations 11 or Mathematics 11

### **Provincial Guide**

- Atlantic Canada Mathematics Curriculum: Mathematics Foundations 12 (Implementation Draft 2001)

### **Core Resources**

- Constructing Mathematics: Book 3 (2000) Student Text / Teacher's Resource
- [http://lrt.ednet.ns.ca/PD/HS\\_Math\\_Website/High\\_School\\_Math.html](http://lrt.ednet.ns.ca/PD/HS_Math_Website/High_School_Math.html)
- A provincial license of Autograph v3.3 has been purchased for all high schools, including Adult High Schools. This provides unlimited access to this software at all high school sites. Two support resources: Autograph Activities: Teacher Demonstrations and Autograph Activities: Student Investigations will also be sent out (March 2011)
- Our High School Math Advisory group, met on Wednesday, March 23<sup>rd</sup>, 2011, and developed a Placement Document that will help in our students choosing high school math courses that they can be successful in consultation with their teacher, Guidance Counselor and parents. These documents were being used beginning in the 2011-2012 school year.