

# Grade 7

## Ontario Math Curriculum

The Ontario math curriculum is organized in five major areas of knowledge and skills. The five areas are as follows: A. Social-Emotional Learning (SEL) Skills in Mathematics and The Mathematical Processes; B. Number; C. Algebra; D. Data; E. Spatial Sense; F. Financial Literacy

### Curriculum Expectations

### Key Concepts

#### A. SEL Skills and Mathematical Processes

1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other 5 strands of the mathematics curriculum

*problem solving*  
*reasoning*  
*proving*  
*reflecting*  
*tools*

*connecting*  
*communicating*  
*representing*  
*selecting*  
*strategies*

*communicate*  
*well-being*  
*self-aware*  
*identity*  
*collaborate*

#### B. Number

1. demonstrate an understanding of numbers and make connections to the way numbers are used in everyday life  
2. use knowledge of numbers and operations to solve mathematical problems encountered in everyday life

*billion*  
*equivalent fraction*  
*factors*  
*fractions*  
*decimals*

*integers*  
*multiples*  
*12 x 12*  
*number*  
*percents*  
*rate*

*perfect squares*  
*rational numbers*  
*square roots*  
*multiplication facts*  
*properties*  
*ratio*

#### C. Algebra

1. identify, describe, extend, create, and make predictions about a variety of patterns, including those found in real-life contexts  
2. demonstrate an understanding of variables, expressions, equalities, and inequalities, and apply this understanding in various contexts  
3. solve problems and create computational representations of mathematical situations using coding concepts and skills  
4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

*code*  
*decimal numbers*  
*decimals*  
*equations*  
*multiple terms*  
*variables*

*mathematical modelling*  
*probability experiment*  
*patterns*  
*solve*  
*whole number*  
*expressions*

## D. Data

1. manage, analyse, and use data to make convincing arguments and informed decisions, in various contexts drawn from real life
2. describe the likelihood that events will happen, and use that information to make predictions

*analyzing  
circle graphs  
data  
dependent event  
differences  
event*

*examining  
graphs  
independent event  
probability  
represent*

## E. Spatial Sense

1. describe and represent shape, location, and movement by applying geometric properties and spatial relationships in order to navigate the world around them
2. compare, estimate, and determine measurements in various contexts

*area  
circle  
circumference  
cylinders  
diameter*

*radius  
dilate  
enlarge  
measure  
shape  
3-dimensional*

*shrink  
spatial sense  
surface area  
volume  
reasoning  
capacity*

## F. Financial Literacy

1. demonstrate the knowledge and skills needed to make informed financial decisions

*accounts  
borrowing  
Canadian dollars  
compare  
consumers  
cost  
investments*

*exchange rates  
fees  
financial goals  
financial literacy  
interest rates  
international currencies  
plan  
savings*

Adapted from *The Ontario curriculum, Grades 1-8: Mathematics (2020)*.

<https://www.dcp.edu.gov.on.ca/en/curriculum/elementary-mathematics/downloads>

& TVO Learn Grade 7 Mathematics. (n.d.). <https://tvolearn.com/pages/grade-7-mathematics>