

CAAT Math Levels C and D – What do I need to study?

Number Operations: The CAAT Number Operations section consists of 40 multiple choice questions that cover interpreting fractions, ratios, factorization, proportions and per cent, equations, using zero as an operator, addition, subtraction, multiplication, and division with whole numbers, fractions, and decimals in order to compute answers to number problems.

Problem Solving: The CAAT Problem Solving sections consists of 40 multiple choice questions about solving problems using whole numbers, decimals, per cent, fractions, geometric concepts and measurement.

Only Metric is used and metric-imperial conversion is not required.

Use the following self-check to identify what you need to learn and study more.

	I can do this ✓	Need to Practice ✓	Need to Learn ✓
Numerical Computation: Calculates using numbers expressed as whole numbers, fractions, decimals, percentages, and integers.			
Whole numbers			
<input type="radio"/> Addition			
<input type="radio"/> Subtraction			
<input type="radio"/> Multiplication			
<input type="radio"/> Division			
<input type="radio"/> Square roots			
Fractions			
<input type="radio"/> Addition			
<input type="radio"/> Subtraction			
<input type="radio"/> Multiplication			
<input type="radio"/> Division			
Decimals			
<input type="radio"/> Addition			
<input type="radio"/> Subtraction			
<input type="radio"/> Multiplication			
<input type="radio"/> Division			
Percentages			
<input type="radio"/> Changing fractions to percentages			
<input type="radio"/> Changing decimals to percentages			
<input type="radio"/> Calculating a percentage of a number			
<input type="radio"/> Calculating a number for a known percentage			
Integers (positive, negative, or zero whole numbers) (also called signed numbers)			
<input type="radio"/> Adding signed numbers/integers			
<input type="radio"/> Subtracting signed numbers/integers			
<input type="radio"/> Multiplying signed numbers/integers			

	I can do this ✓	Need to Practice ✓	Need to Learn ✓
○ Dividing signed numbers/integers			
Measurement			
○ Perform numerical computations involving units of measurement			
○ Square Root			
Basic Geometry: Includes Pythagorean Theorem, formulas for perimeter, area, volume, and surface area and an understanding of the mathematical ideas behind the steps of a solution as well as the solution.			
○ Perimeter			
○ Area			
○ Volume			
Basic Algebra: Can use various appropriate techniques to solve basic equations and Inequalities.			
○ Order of operations			
○ Exponents			
○ Solving an equation for an unknown value			
Problem Solving appears in CAAT C and D. In CAAT C, whole numbers, decimals, per cent, fractions, geometric concepts and measurement are used. CAAT D contains all the math listed in this table but it is more complex e.g. larger numbers and lengthier equations. All questions are in the form of a word problem however there is no problem solving section. Thus, the challenge for word problems is much less.			
Problem Solving: Solve problems by following apparent steps to reach solutions - selects appropriate steps to a solution, chooses and performs required operations (may need to make inferences) uses strategies to check accuracy (including estimation, repeating, reverse operation). Mathematical problem solving involves logical reasoning and also the comprehension of word problems and documents (words in a graphic interface such as charts and tables).			
○ Decimals, fractions and percent			
○ Square Root			
○ Ratio and Proportion			
○ Includes measurement (metric only)			

If you find that you need practice or need to learn some of this math, you can find help at the following links.

- www.math.com
- www.wem.mb.ca/learning_on_demand_numeracy.aspx
- www.khanacademy.org/math
- www.analyzemath.com/precalculustests.html
- www.senecacollege.ca/registrar/documents/pre-math1.pdf
- www.jamesbrennan.org/algebra/ (algebra)
- www.jamesbrennan.org/algebra/problems/problem_solving_strategies (word problems)
- www.basic-mathematics.com/basic-geometry.html (geometry)
- www.studygeek.org/
- www.youtube.com/user/videomathtutor
- www.studygs.net/mathproblems.htm (word problems)
- www.math.about.com/cs/testprep/a/ps.htm (word problems)
- www.wolframalpha.com/