



# COURSE OUTLINE

## WELLS ACADEMY GRADES 9/10 CONTEST PREPERATION 2024

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### Course Description

This course will assist students in developing the tools to approach math contests. Students will be exposed to the main overview of contests and their subject matter. Classes will encourage students to think differently about math and include direct practice with questions from past contests.

Students will initially prepare for the Cayley (grade 9) and Pascal (grade 10) contests to be written in February 2024 as well as the Fryer (grade 9) and Galois (grade 10) to be written in April 2024 contests. Both contest sets are created by the CEMC of the University of Waterloo. The final contest prepared for will be the American Mathematics Competition (AMC)10 from the Mathematical Association of America which is to be written in November.

## Weekly Schedule

<b>Week</b>	<b>Topic</b>
<b>Cayley and Pascal (CEMC) Prep</b>	
<i>Jan. 8</i>	Introduction and Contest Overview
<i>Jan. 15</i>	Counting and Probability I
<i>Jan. 22</i>	Counting and Probability II
<i>Jan. 29</i>	Exponents
<i>Feb. 5</i>	Algebra
<i>Feb. 12</i>	Coordinate Geometry
<i>Feb. 19</i>	Geometry
<i>Feb. 26</i>	Contest Practice and Review
<b>Cayley and Pascal Contest Writing (February 28<sup>th</sup>, 2024)</b>	
<b>Fryer and Galois (CEMC) Prep</b>	
<i>Mar. 4</i>	Patterns and Sequences
<i>Mar. 11</i>	More Geometry Examples
<i>Mar. 18</i>	More Counting Examples
<i>Mar. 25</i>	Contest Practice and Review I
<i>Apr. 1</i>	Contest Practice and Review II
<b>Fryer and Galois Contest Writing (April 4<sup>th</sup>, 2024)</b>	
<b>AMC10 (MAA) Prep (January 2024)</b>	
<i>Apr. 8</i>	Data Analysis
<i>Apr. 15</i>	Number Theory
<i>Apr. 22</i>	AMC Counting Examples
<i>May 6</i>	AMC Geometry Examples
<i>May 27</i>	AMC Algebra Examples
<i>June 3</i>	AMC Contest Practice I
<i>June 10</i>	AMC Contest Practice II
<i>June 17</i>	AMC Contest Practice III