



COURSE OUTLINE

WELLS ACADEMY GRADES 7/8 CONTEST PREPERATION 2024

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 prepare for 3 main contests. The Euler (grade 7) and Lagrange (grade 8) contests from Mathematica, the Gauss (Grade 7/8) from the CEMC of the University of Waterloo, and the American Mathematics Competition (AMC) 8 from the Mathematical Association of America.

Weekly Schedule

Week	Topic
Mathematica Contests: Euler and Lagrange (April 10th, 2024) + Gauss (May 15th, 2024) Prep	
<i>Jan. 8</i>	Introduction and Contest Overview
<i>Jan. 15</i>	Number Theory
<i>Jan. 22</i>	Counting and Probability I
<i>Jan. 29</i>	Counting and Probability II
<i>Feb. 5</i>	Counting and Probability III
<i>Feb. 12</i>	Algebra
<i>Feb. 19</i>	Algebra II
<i>Feb. 26</i>	Geometry I
<i>Mar. 4</i>	Geometry II
<i>Mar. 11</i>	Data Analysis
<i>Mar. 18</i>	Patterning and Sequences
<i>Mar. 25</i>	Ratios and Rates
<i>Apr. 1</i>	Logic Problems
<i>Apr. 8</i>	Euler and Lagrange Contest Practice and Review
Euler and Lagrange Contest Writing (April 10th, 2024)	
<i>Apr. 15</i>	Gauss Contest Practice and Review I
<i>Apr. 22</i>	Gauss Contest Practice and Review II
<i>May 6</i>	Gauss Contest Practice and Review III
Gauss Contest Writing (May 15th, 2024)	
AMC 8 (MAA) Prep (January 2024)	
<i>May 27</i>	Introduction and Contest Overview
<i>June 3</i>	AMC Contest Practice I
<i>June 10</i>	AMC Contest Practice II
<i>June 17</i>	AMC Contest Practice III