

High School Geometry

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Preface

Open tools for writing open interactive textbooks

A tutorial resource: R, RStudio, RMarkdown,
Bookdown, Github, Shiny, hypothes.is, Zotero



Matthew J. C. Crump (2018)

Taylor, Steven A. (2018). High School Geometry. <https://phsmath.github.io/OERGeometry/>

This is an Open Education Resource for High School Geometry that meets the requirements of Oregon's High School Math Standards.

This web-book is itself a work in progress. All of the source code needed to compile this book yourself is included in the github repository for this book. You can download the repository, replace this text with your own, and then compile your book as a web-page, .pdf or epub.

Feel free to note any typographical errors or other problems by submitting an issue to this repository.

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Chapter 1

Reasoning and Proof

1.1 Axiomatic Development of Mathematics

1.1.1 Undefined Terms

1.1.2 Undefined Relations

1.1.3 Axioms Relating the Undefined Terms and Undefined Relations

1.1.4 Theorems

1.2 Logic and Propositional Calculus

1.2.1 Propositions and Compound Propositions

1.3 Reasoning

1.3.1 Inductive Reasoning

1.3.2 Deductive Reasoning

1.4 Logical Operations

1.4.1 Conditional Statements

1.4.2 Basic Logical Operations

1.4.3 Propositions and Truth Tables

1.4.4 Tautologies and Contradictions

1.4.5 Logical Equivalence

1.4.6 Algebra of Propositions

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1.4.9 Logical Implication

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Chapter 2

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2.3 Midpoint and Distance Formulas

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2.5 Angle Pair Relationships

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Relationships within Triangles

Chapter 6

Similarity

Chapter 7

Right Triangles and Trigonometry

Chapter 8

Quadrilaterals

Chapter 9

Transformations

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Circles

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Measurements

Chapter 12

Probability