

Foundations and Pre-calculus Mathematics 10

Content Organization by Strands

STRAND	CONTENT PLAN
<i>Measurement</i>	<ul style="list-style-type: none"> ■ Chapter 1 Measurement ■ Chapter 2 Trigonometry ■ Project 1 Ramp It Up! ■ Cumulative Review Chapters 12
<i>Algebra and Number</i>	<ul style="list-style-type: none"> ■ Chapter 3 Factors and Products ■ Chapter 4 Roots and Powers ■ Project 2 Human Calculators ■ Cumulative Review Chapters 1 – 4
<i>Relations and Functions</i>	<ul style="list-style-type: none"> ■ Chapter 5 Relations and Functions ■ Chapter 6 Linear Functions ■ Chapter 7 Systems of Linear Equations ■ Project 3 Exercise Mind and Body ■ Cumulative Review Chapters 1 – 7

The Foundations and Pre-calculus Mathematics 10 curriculum divides naturally into 3 distinct strands. Organizing the textbook content by strand, while still making connections across strands, supports a big-ideas approach to mathematics content development. Retaining the strand distinctions in the organization of *Pearson Foundations and Pre-calculus Mathematics 10* fosters student success because it:

- allows students to see how related concepts are connected
- allows students to revisit and reactivate required prior learning over an extended time period
- allows for deeper understanding by extending the time over which students develop related concepts, building from concrete to abstract
- allows for the provision of a variety of mathematical learning experiences ranging from simple to complex
- provides extended time for students to reflect on and monitor their learning, and seek assistance if required
- provides time for students to synthesize, summarize, and organize their understanding of the big ideas of the unit
- creates a structure within which summative projects can offer coherent ways to connect the content of a unit

Course at a Glance

Pearson Foundations and Pre-calculus Mathematics 10 starts with the Measurement strand because it has a strong visual aspect to support learning, and it relates to students' mathematical experiences from prior grades. Then, the Algebra and Number strand lays the foundation students need for the coordinate geometry work coming up in the Relations and Functions strand. The chapters sequence in each strand ensures a logical developmental flow; work in Chapter 1, for example, provides required content for Chapter 2. Because of these considerations, you are strongly recommended to follow the chapter sequence of the student text in your course plan.

Here is a suggested timeframe for your instruction, based on a semester system, that allows for pre-requisite review, mid-chapter and end-of-chapter, as well as summative review and assessment.

Week 1	Chapter 1 Measurement * 7 lessons
Week 2	
Week 3	Chapter 2 Trigonometry * 7 lessons
Week 4	
Week 5	Summative Assessment: Chapters 1 and 2
Week 6	Chapter 3: Factors and Products * 8 lessons
Week 7	
Week 8	Chapter 4: Factors and Products * 6 lessons
Week 9	
Week 10	Chapter 5: Relations and Functions * 7 lessons
Week 11	
Week 12	Chapter 6: Linear Functions * 6 lessons
Week 13	
Week 14	Chapter 7: Systems of Linear Equations * 6 lessons
Week 15	
Week 16	Summative Assessment: Chapters 5 to 7
	Review and Assessment: Chapters 1 to 7

* Each lesson of the Student Book is designed to be completed in one class period of 60 to 75 min.