

Greetings from the Land of Trigonometry/Pre-Calculus,

The mathematical “step” from Algebra 2 to Trigonometry/Pre-Calculus AB can be very challenging as this rigorous course is fast-paced and tailored to prepare students for AP Calculus AB. There are several topics covered in the Honors Algebra 2 class which Algebra 2 does not cover, due to pacing constraints. Students who do not take the time to catch up on the missing topics find it difficult to be successful in Trig/Pre-Calc. AB. The Algebra 2 staff met and came up with a brief list of topics students need to learn over the summer in order to bridge this knowledge gap. **This assignment is not mandatory but highly recommended.**

- The following assignments are taken from: Holt McDougal Algebra 2 (HMH Fuse Algebra 2) – Common Core App Edition
- Students should watch the videos found in the book for each section before attempting the assignments.
- Solutions are posted online. <https://learn.vcs.net/course/view.php?id=1112>

Chapter Section/Concept/Assignment

1. Chapter 12.5 → Parabolas (focus and directrix)
Do Problems: **12.5** #18 – 36m3, 37; **12.6** #22, 26, 30
2. Chapter 10.5 → Law of Sines
Do Problems: **10.5** #15 – 30m3, 32, 34, 38
3. Chapter 10.6 → Law of Cosines and Heron’s Formula
Do Problems: **10.6** #9 – 21m3, 27 – 33 odd
4. Chapter 11.1 → Graphs of Sine and Cosine
Do Problems: **11.1a** #12 – 18, 24, 33, 35 **11.1b** #19-23, 25, 27, 34, 36
5. Chapter 11.2 → Graphs of other Trig Functions
Do Problems: **11.2a** #10, 12, 13, 21 **11.2b** #11, 27, 29, 31

Practicing ALEKs over the summer is a great way to keep algebra skills sharp. The Trig/Pre-Calc AB class prerequisites assume students walk into the school year with strong Algebra 2 skills, which means there is no Algebra 2 review at the beginning of the semester.

Our hope is that you have a restful summer, and that everyone returns to school refreshed and ready to enter the exciting realm of Trigonometry/Pre-calculus AB.

We are looking forward to meeting you in the fall!

—The Trigonometry/Pre-Calculus AB Teaching Team