

The AP Calculus Summer 2019 Homework

As-salaamu alaykum wa rahmatu Allahi wa barakatuh.

It is essential that you are determined to work hard if you wish to take calculus.

Calculus AB is a course in single-variable calculus that includes Fundamental Theorem of Calculus, techniques and applications of the derivative, and techniques and applications of the definite integral. It is equivalent to at least a semester of calculus at most colleges and universities.

Review of precalculus: To help you get ready and have a good start it is recommended that you review precalculus lessons during this summer break. A review of precalculus is chapter 1 of the calculus textbook. Calculus book chapter 1 in pdf format is attached. You may use this file or get a Calculus textbook from the school.

Qualifying test: In the first week of school in Fall there will (in sha Allah) be a qualifying test based on precalculus. The overview of precalculus is calculus textbook chapter 1 (attached). So, revise precalculus. You must pass this test to be in the calculus class. If you have questions you may email me at iibrahim@ifsvp.org.

The Princeton Review: Please, buy yourself a copy of The Princeton Review AP-Calculus AB & BC, any Edition.

Relax with Dhikrullah: It is also essential that you come relaxed but poised ready to fly. So, have an enjoyable summer and don't lose focus on Allah ta'ala and the ways of approach to Him.

Wa alaykum salaamu wa rahmatu Allahi wa barakatuh.

IAI.

Calculus AP Summer Work

The following is recommended to be done over the summer in preparation for AP Calculus class:

Text book:

Calculus: Graphical, Numerical, Algebraic 4th Edition, by Ross L. Finney (Author), Franklin D. Demana (Author), Bert K. Waits (Author), Daniel Kennedy (Author) Year: 2012

1. Chapter 1-Algebra-precalculus review chapter.
Study and do the exercises questions listed below (all sections to be studied with the assignments as listed in the table below from the exercise pages)

Sec. 1: Lines	40- 48
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Sec. 2: Functions-graphs	34,44,53,54
Sec. 3: Exponential Fns	10,14,24,32,36
Sec. 4: Parametric Fns	4,6,12,20,24,30
Sec. 5: Logarithms	1-6,10,18,24,36,40,51
Sec. 6: Trigo Fns	3,4,10,16,20,28,34

2. In addition, review Rational functions. Chapter 7 of algebra2 text may be helpful:
BIG IDEAS MATH Algebra 2: Common Core Student Edition 2015 (1st Edition) by
Houghton Mifflin Harcourt, Laurie Boswell, Ron Larson
3. Chapter test-: Do the chapter one pretests A and B attached.
4. You may have to take a qualifying test into calculus. The study guide attached for precalculus may help.
5. You may study chapter 12 of Precalculus textbook. This is optional but helpful towards calculus chap. 2.