

## Ap Computer Science Principles Course Instructor Notes

What are "essential questions," and how do they differ from other kinds of questions? What's so great about them? Why should you design and use essential questions in your classroom? Essential questions (EQs) help target standards as you organize curriculum content into coherent units that yield focused and thoughtful learning. In the classroom, EQs are used to stimulate students' discussions and promote a deeper understanding of the content. Whether you are an Understanding by Design (UbD) devotee or are searching for ways to address standards—local or Common Core State Standards—in an engaging way, Jay McTighe and Grant Wiggins provide practical guidance on how to design, initiate, and embed inquiry-based teaching and learning in your classroom. Offering dozens of examples, the authors explore the usefulness of EQs in all K-12 content areas, including skill-based areas such as math, PE, language instruction, and arts education. As an important element of their backward design approach to designing curriculum, instruction, and assessment, the authors

- \*Give a comprehensive explanation of why EQs are so important;
- \*Explore seven defining characteristics of EQs;
- \*Distinguish between topical and overarching questions and their uses;
- \*Outline the rationale for using EQs as the focal point in creating units of study; and
- \*Show how to create effective EQs, working from sources including standards, desired understandings, and student misconceptions.

Using essential questions can be challenging—for both teachers and students—and this book provides guidance through practical and proven processes, as well as suggested "response strategies" to encourage student engagement. Finally, you will learn how to create a culture of inquiry so that all members of the educational community—students, teachers, and administrators—benefit from the increased rigor and deepened understanding that emerge when essential questions become a guiding force for learners of all ages.

AP® Computer Science Principles Crash Course® Fully Revised and Updated 2nd Edition for the 2021 Exam! A Higher Score in Less Time! At REA, we invented the quick-review study guide for AP® exams. A decade later, REA's Crash Course® remains the top choice for AP® students who want to make the most of their study time and earn a high score. Here's why more AP® teachers and students turn to REA's AP® Computer Science Principles Crash Course®: Targeted Review – Study Only What You Need to Know. REA's all-new 2nd edition addresses all the latest test revisions. Our Crash Course® is based on an in-depth analysis of the revised AP® Computer Science Principles Course and Exam Description and sample AP® test questions, released by the College Board in 2020. We cover only the information tested on the exam, so you can make the most of your valuable study time. Expert Test-taking Strategies and Advice. Written by a veteran AP® Computer Science teacher, the book gives you the topics and critical context that will matter most on exam day. Crash Course®

relies on the author's extensive analysis of the test's structure and content. By following his advice, you can boost your score. Realistic Practice Questions – a mini-test in the book, a full-length exam online. Are you ready for your exam? Try our focused practice set inside the book. Then go online to take our full-length practice exam. You'll get the benefits of timed testing, detailed answers, and automatic scoring that pinpoints your performance based on the official AP® exam topics – so you'll be confident on test day. When it's crucial crunch time and your Advanced Placement® exam is just around the corner, you need REA's Crash Course for AP® Computer Science Principles!

A surprisingly simple way for students to master any subject--based on one of the world's most popular online courses and the bestselling book *A Mind for Numbers* *A Mind for Numbers* and its wildly popular online companion course "Learning How to Learn" have empowered more than two million learners of all ages from around the world to master subjects that they once struggled with. Fans often wish they'd discovered these learning strategies earlier and ask how they can help their kids master these skills as well. Now in this new book for kids and teens, the authors reveal how to make the most of time spent studying. We all have the tools to learn what might not seem to come naturally to us at first--the secret is to understand how the brain works so we can unlock its power. This book explains:

- Why sometimes letting your mind wander is an important part of the learning process
- How to avoid "rut think" in order to think outside the box
- Why having a poor memory can be a good thing
- The value of metaphors in developing understanding
- A simple, yet powerful, way to stop procrastinating

Filled with illustrations, application questions, and exercises, this book makes learning easy and fun.

AP® Computer Science Principles Crash Course® A Higher Score in Less Time! REA's AP® Computer Science Principles Crash Course® is the top choice for the last-minute studier or any Computer Science Principles student who wants a quick refresher on the course. Are you crunched for time? Have you started studying for your Advanced Placement® Computer Science Principles exam yet? How will you memorize everything you need to know before the test? Do you wish there was a fast and easy way to study for the exam AND boost your score? If this sounds like you, don't panic. REA's Crash Course for AP® Computer Science Principles is just what you need. Our Crash Course gives you: Targeted Review - Study Only What You Need to Know. The review is based on an in-depth analysis of the AP® Computer Science Principles course description outline and sample AP® test questions. It covers only the information tested on the exam, so you can make the most of your valuable study time. Expert Test-taking Strategies and Advice. Written by Jacqueline Corricelli, an award-winning AP® Computer Science Principles teacher and test development expert, the book gives you the topics and critical context that will matter most on exam day. Crash Course® relies on the author's extensive analysis of the test's structure and content. By following her advice, you can boost your score. REA's Online

Practice Exam. Are you ready for your exam? Take REA's practice exam and find out. You'll get the benefits of timed testing, detailed explanations of answers, and automatic scoring analysis. Our practice exam is balanced to include every topic and type of question found on the actual AP® exam, so you'll be confident on test day. Whether you're cramming for the exam or reinforcing what you learn as you go through the course, this is the study guide every AP® Computer Science Principles student must have. About the Author Jacqueline Corricelli earned her B.A. in Mathematics and Statistics from the University of Connecticut and her M.S. in Mathematics Secondary Education at Westfield State University in Massachusetts. In 2013, she received the Presidential Award for Excellence in Mathematics and Science Teaching, the United States' highest honor for K-12 teachers of mathematics and science (including computer science). In 2017, she was one of just 10 teachers to be honored with the Computer Science Teaching Excellence Award. This international award is sponsored by Infosys Foundation USA; the Association for Computing Machinery, the world's leading computing society; and the Computer Science Teachers Association. Ms. Corricelli teaches AP Computer Science Principles at Conard High School, West Hartford, Connecticut, and serves as an independent consultant to the College Board for the AP Computer Science Principles Course.

An investigation into why so few African American and Latino high school students are studying computer science reveals the dynamics of inequality in American schools. The number of African Americans and Latino/as receiving undergraduate and advanced degrees in computer science is disproportionately low, according to recent surveys. And relatively few African American and Latino/a high school students receive the kind of institutional encouragement, educational opportunities, and preparation needed for them to choose computer science as a field of study and profession. In *Stuck in the Shallow End*, Jane Margolis looks at the daily experiences of students and teachers in three Los Angeles public high schools: an overcrowded urban high school, a math and science magnet school, and a well-funded school in an affluent neighborhood. She finds an insidious “virtual segregation” that maintains inequality. Two of the three schools studied offer only low-level, how-to (keyboarding, cutting and pasting) introductory computing classes. The third and wealthiest school offers advanced courses, but very few students of color enroll in them. The race gap in computer science, Margolis finds, is one example of the way students of color are denied a wide range of occupational and educational futures. Margolis traces the interplay of school structures (such factors as course offerings and student-to-counselor ratios) and belief systems—including teachers' assumptions about their students and students' assumptions about themselves. *Stuck in the Shallow End* is a story of how inequality is reproduced in America—and how students and teachers, given the necessary tools, can change the system.

*Colleges Worth Your Money: A Guide to What America's Top Schools Can Do for You* is an invaluable guide for students making the crucial decision of where to

attend college when our thinking about higher education is radically changing. At a time when costs are soaring and competition for admission is higher than ever, the college-bound need to know how prospective schools will benefit them both as students and after graduation. *Colleges Worth Your Money* provides the most up-to-date, accurate, and comprehensive information for gauging the ROI of America's top schools, including: In-depth profiles of 175 of the top colleges and universities across the U.S.; Over 75 key statistics about each school that cover unique admissions-related data points such as gender-specific acceptance rates, early decision acceptance rates, and five-year admissions trends at each college. The solid facts on career outcomes, including the school's connections with recruiters, the rate of employment post-graduation, where students land internships, the companies most likely to hire students from a particular school, and much more. Data and commentary on each college's merit and need-based aid awards, average student debt, and starting salary outcomes. *Top Colleges for America's Top Majors* lists highlighting schools that have the best programs in 40+ disciplines. Lists of the "Top Feeder" undergraduate colleges into medical school, law school, tech, journalism, Wall Street, engineering, and more. *Barron's AP Computer Science Principles Premium with 6 Practice Tests* is designed to help students prepare for exam topics, regardless of what computer language or method they learned. The book is aligned with the course changes that will be implemented in the 2020-2021 academic year. This edition includes: Three practice exams in the book Three online practice exams In-depth instructions on how to complete the Explore Performance Tasks and the Create Performance Tasks. Sample responses that earn high scores and sample responses that earn low scores

REA's Crash Course for the AP® Physics 1 Exam Gets You a Higher Advanced Placement® Score in Less Time About this new exam: The AP Physics 1 course focuses on the big ideas typically included in the first and second semesters of an algebra-based, introductory college-level physics course. REA's all-new AP Physics 1 Crash Course is perfect for the time-crunched student, the last-minute studier, or anyone who wants a refresher on the subject. Are you crunched for time? Have you started studying for your Advanced Placement® Physics 1 exam yet? How will you memorize everything you need to know before the test? Do you wish there was a fast and easy way to study for the exam AND boost your score? If this sounds like you, don't panic. REA's Crash Course for AP® Physics 1 is just what you need. Our Crash Course gives you: Targeted, Focused Review - Study Only What You Need to Know The Crash Course is based on an in-depth analysis of the new AP® Physics 1 course description outline and actual AP® test questions. It covers only the information tested on the exam, so you can make the most of your valuable study time. Written by an AP® Physics teacher, the targeted review prepares students for the new test by focusing on the new framework concepts and learning objectives tested on the redesigned AP® Physics 1 exam. Easy-to-read review chapters in outline format cover all the

topics tested on the new exam: kinematics; dynamics; Newton's laws; circular motion and universal law of gravitation; work, energy, and conservation of energy; rotational motion; DC circuits; mechanical waves and sound; and more. The book also features must-know terms all AP® Physics students should know before test day. Expert Test-taking Strategies With our Crash Course, you can study the subject faster, learn the crucial material, and boost your AP® score all in less time. Our author shares detailed question-level strategies and explains the best way to answer the multiple-choice and free-response questions you'll encounter on test day. By following our expert tips and advice, you can boost your overall point score! FREE Practice Exam After studying the material in the Crash Course, go to the online REA Study Center and test what you've learned. Our free practice exam features timed testing, detailed explanations of answers, and automatic scoring analysis. The exam is balanced to include every topic and type of question found on the actual AP® exam, so you know you're studying the smart way. Whether you're cramming for the test at the last minute, looking for extra review, or want to study on your own in preparation for the exams - this is the study guide every AP® Physics 1 student must have. When it's crucial crunch time and your Advanced Placement® exam is just around the corner, you need REA's Crash Course for AP® Physics 1!

Barron's AP Computer Science Principles Premium with 6 Practice Tests is designed to help students prepare for exam topics, regardless of what computer language or method they learned. The book is aligned with the course changes that will be implemented in the 2020-2021 academic year. The College Board has announced that there are May 2021 test dates available are May 3-7 and May 10-14, 2021. This edition includes: Three practice exams in the book Three online practice exams In-depth instructions on how to complete the Explore Performance Tasks and the Create Performance Tasks. Sample responses that earn high scores and sample responses that earn low scores MATCHES THE LATEST EXAM! Let us supplement your AP classroom experience with this easy-to-follow study guide. The immensely popular 5 Steps to a 5: AP Computer Science Principles guide has been updated for the 2021-22 school year and now contains: 3 full-length practice exams that reflect the latest exam Access to a robust online platform Comprehensive overview of the AP Computer Science Principles exam format Description of the extensive changes to the course and details about the new Explore Curricular Requirements Abundant examples of the new stimulus type questions Proven strategies on extracting information and confidently answering multiple-choice questions New Create Performance Task prompts and best response tactics Chamine exposes how your mind is sabotaging you and keeping you from achieving your true potential. He shows you how to take concrete steps to unleash the vast, untapped powers of your mind. EVERYTHING YOU NEED TO HELP SCORE A PERFECT 5! Ace the 2022 AP English Literature & Composition Exam with The Princeton Review's

comprehensive study guide. Includes 4 full-length practice tests, thorough content reviews, targeted strategies for every section, and access to online extras. Techniques That Actually Work. • Tried-and-true strategies to help you avoid traps and beat the test • Tips for pacing yourself and guessing logically • Essential tactics to help you work smarter, not harder Everything You Need for a High Score. • Fully aligned with the latest College Board standards for AP® English Literature & Composition • Comprehensive coverage of all test topics • Engaging activities to help you critically assess your progress • Access to study plans, helpful pre-college information, and more via your online Student Tools account Practice Your Way to Excellence. • 4 full-length practice tests (3 in the book, 1 online) with detailed answer explanations • Practice drills for poetry and prose passages • Sample essays with tips to help you effectively plan and organize your writing on the day of the exam

REA's Crash Course for the AP® Calculus AB & BC Exams - Gets You a Higher Advanced Placement® Score in Less Time 2nd Edition - Updated for the 2017 Exams Crash Course is perfect for the time-crunched student, the last-minute studier, or anyone who wants a refresher on the subject. Are you crunched for time? Have you started studying for your Advanced Placement® Calculus AB & BC exams yet? How will you memorize everything you need to know before the tests? Do you wish there was a fast and easy way to study for the exams AND boost your score? If this sounds like you, don't panic. REA's Crash Course for AP® Calculus AB & BC is just what you need. Our Crash Course gives you: Targeted, Focused Review - Study Only What You Need to Know The Crash Course is based on an in-depth analysis of the AP® Calculus AB & BC course description outline and actual AP® test questions. It covers only the information tested on the exams, so you can make the most of your valuable study time. Written by an experienced AP® Calculus instructor, the targeted review chapters prepare students for the test by only focusing on the topics tested on the AP® Calculus AB & BC exams. Our easy-to-read format gives students a crash course in AP® Calculus AB & BC and covers functions, graphs, units, derivatives, integrals, and polynomial approximations and series. Expert Test-taking Strategies Our author shares detailed question-level strategies and explain the best way to answer AP® questions you'll find on the exams. By following this expert tips and advice, you can boost your overall point score! Take REA's Practice Exams After studying the material in the Crash Course, go to the online REA Study Center and test what you've learned. Our free practice exams (one online for both Calculus AB and Calculus BC) features timed testing, detailed explanations of answers, and automatic scoring analysis. Each exam is balanced to include every topic and type of question found on the actual AP® exam, so you know you're studying the smart way. Whether you're cramming for the test at the last minute, looking for extra review, or want to study on your own in preparation for the exams - this is the study guide every AP® Calculus AB & BC student must have. When it's crucial crunch time and your Advanced Placement® exam is just

around the corner, you need REA's Crash Course for AP® Calculus AB & BC! Computer science is the world's fastest growing field of study, and this growth is showing no signs of slowing down. As a new field, computer science can seem intimidating, but it should not be scary to learn or difficult to understand. If you have ever turned on a phone or surfed the Internet then you have used a computer and should have a basic understanding of what happens when you click the mouse or touch the screen--and how fast it happens! Computer Science Principles introduces the creative side of computing. Once you've made your way through this book, you'll be editing photos, designing websites, coding JavaScript, and getting organized with spreadsheets--and along the way you'll learn the foundational concepts of computer science. How do computers convert information into ones and zeros and send it thousands of miles in a blink of the eye? What is an IP address? What do TCP/IP, DNS, HTML, and CSS stand for? How can a hard drive store large movies and thousands of songs? How can secrets be sent in plain sight? These questions--and more--are answered in Computer Science Principles.

SIGCSE '18: The 49th ACM Technical Symposium on Computing Science Education Feb 21, 2018-Feb 24, 2018 Baltimore, USA. You can view more information about this proceeding and all of ACMs other published conference proceedings from the ACM Digital Library: <http://www.acm.org/dl>.

Barron's AP Computer Science A is completely up-to-date for the May 2020 exam changes. The course outline and free response questions reflect updates to the topics breakdown and free-response section. You'll get the key content review, practice tests, and effective strategies you need to be prepared for the exam. This edition features: Five full-length practice tests, including three online One diagnostic test to help you determine which sections you need to focus on Specific strategies for the AP Computer Science A exam Comprehensive content review Glossary of useful computer terms

A comprehensive look at the promise and potential of online learning In our digital age, students have dramatically new learning needs and must be prepared for the idea economy of the future. In Getting Smart, well-known global education expert Tom Vander Ark examines the facets of educational innovation in the United States and abroad. Vander Ark makes a convincing case for a blend of online and onsite learning, shares inspiring stories of schools and programs that effectively offer "personal digital learning" opportunities, and discusses what we need to do to remake our schools into "smart schools." Examines the innovation-driven world, discusses how to combine online and onsite learning, and reviews "smart tools" for learning Investigates the lives of learning professionals, outlines the new employment bargain, examines online universities and "smart schools" Makes the case for smart capital, advocates for policies that create better learning, studies smart cultures

**MATCHES THE LATEST EXAM!** Let us supplement your AP classroom experience with this multi-platform study guide. The immensely popular 5 Steps

to a 5: AP Computer Science Principles Elite Student Edition has been updated for the 2021-22 school year and now contains: 3 full-length practice exams (available both in the book and online) that reflect the latest exam “5 Minutes to a 5” section with a 5-minute activity for each day of the school year that reinforces the most important concepts covered in class Access to a robust online platform Comprehensive overview of the AP Computer Science Principles exam format Description of the extensive changes to the course and details about the new Explore Curricular Requirements Abundant examples of the new stimulus type questions Proven strategies on extracting information and confidently answering multiple-choice questions New Create Performance Task prompts and best response tactics

Learning to Program with Alice, 3e is appropriate for all one-semester pre-CS1 and computer literacy courses, and for integration into the first weeks of many introductory CS1 courses. ¿ Alice was designed to make programming concepts easier to teach and learn. In the Third Edition of Learning to Program with Alice, Alice's creators offer a complete full-color introduction to the interactive Alice programming environment. The authors make extensive use of program visualization to establish an easy, intuitive relationship between program constructs and the 3D graphics animation action in Alice. Students discover how Alice blends traditional problem-solving techniques with Hollywood-style storyboarding. Fundamental object-oriented programming concepts and language syntax are taught independently. Programming concepts can be taught from either an objects-first or an objects-early approach, with an optional early introduction to events. The book's Java-like syntax allows students to view their program code, simplifying their transitions to Java, C++, C#, or other object-oriented languages. This new edition includes over 60% revised exercises and a "sneak peek" at Alice 3.0. ¿ Collection of Alice 3D “example worlds” on CD-ROM – Students can load an example world and enter their own code to make it work. Every day, billions of photographs, news stories, songs, X-rays, TV shows, phone calls, and emails are being scattered around the world as sequences of zeroes and ones: bits. We can't escape this explosion of digital information and few of us want to-the benefits are too seductive. The technology has enabled unprecedented innovation, collaboration, entertainment, and democratic participation. But the same engineering marvels are shattering centuries-old assumptions about privacy, identity, free expression, and personal control as more and more details of our lives are captured as digital data. Can you control who sees all that personal information about you? Can email be truly confidential, when nothing seems to be private? Shouldn't the Internet be censored the way radio and TV are? is it really a federal crime to download music? When you use Google or Yahoo! to search for something, how do they decide which sites to show you? Do you still have free speech in the digital world? Do you have a voice in shaping government or corporate policies about any of this? Blown to Bits offers provocative answers to these questions and tells intriguing real-life

stories. This book is a wake-up call To The human consequences of the digital explosion.

Barron's brand new AP Computer Science Principles is designed to help students prepare for exam topics, regardless of what computer language or method they learned. This book is aligned with the AP Computer Science course, which was first introduced in the 2017-2018 academic year. This edition includes: Three practice exams in the book, with an additional exam available online In-depth instructions on how to complete the Explore Performance Tasks and the Create Performance Tasks. Sample responses that earn high scores and sample responses that earn low scores The questions and examples all reflect the style of recent exam questions and cover the essential knowledge topics outlined by College Board.

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Creating Future Creators is a book about computer science and entrepreneurship. It is written with the intention of spreading knowledge of computer science to those who have previously little to no experience while empowering its readers to spread that knowledge themselves. We define the word "entrepreneurship" not only in regards to the process of creating a business from an idea but mostly the building blocks to becoming a 21st-century innovator. AccelerateKID(R)'s mission has always centered on Youth, Entrepreneurship,

and Technology Education (TechEd). This book will focus on all three parts of that goal in the context of a novel as well as a handbook with exercises that will help drive the concept for the readers. This book covers material on two separate AP (Advanced Placement) courses, at a middle school level. This means that this book can be used in both a Pre-AP class or as an introductory class for AP Computer Science Principles and AP Computer Science A (Java Programming Language). The beginning and end of *Creating Future Creators* follow the structure of the AP Computer Science Principles course, which goes over practices and concepts of computer science in a holistic way. The core of the book follows the material covered in AP Computer Science A, which focuses more on the technical skills and mechanics of programming in Java. By reading all of this book, you will become familiar with the contents of both of these courses, but if you wish to cover only one of the courses, you will find AP Computer Science Principles on general computing in chapters 1-6; while the book will close out with the use of the Internet and Global Impact in chapters 14 and 15 respectively. AP Computer Science A has its material covered in the rest of the book, chapters 7-13. For more information on the location of the book's contents, refer to the mind map.

**MATCHES THE NEW EXAM!** Get ready to ace your AP Computer Science Principles exam with this easy-to-follow, multi-platform study guide Teacher-Recommended and Expert-Reviewed The immensely popular test prep guide has been updated and revised with new material to match the latest exam requirements. *5 Steps to a 5: AP Computer Science Principles, 2nd Edition* offers an easy to follow, effective 5-step study plan to help you build the skills, knowledge, and test-taking confidence you need to reach your full potential. The book includes hundreds of practice exercises with thorough answer explanations and sample responses. You'll learn how to master the multiple-choice questions and achieve a higher score on this demanding exam. *5 Steps to a 5: AP Computer Science Principles, 2nd Edition* features: 3 full-length practice exams that reflect the new exam requirements Comprehensive overview of the AP Computer Science Principles exam format Description of the extensive changes to the course and details about the new Explore Curricular Requirements Abundant examples of the new stimulus type questions Proven strategies on extracting information and confidently answering multiple-choice questions New Create Performance Task prompts and best response tactics

Research has shown that there is no greater influence on a student's success than the quality of his or her teacher. This book presents the research findings which demonstrate the connection between teacher effectiveness and student achievement. Author James Stronge describes and explains the value-added teacher-assessment research that has emerged in the past decade and demystifies the power and practices of effective teachers.

**AP® Computer Science Principles Crash Course, For the 2021 Exam, 2nd Ed., Book + Online** Get a Higher Score in Less Time Research & Education Assoc.

Nine revolutionary algorithms that power our computers and smartphones Every day, we use our computers to perform remarkable feats. A simple web search picks out a handful of relevant needles from the world's biggest haystack. Uploading a photo to Facebook transmits millions of pieces of information over numerous error-prone network links, yet somehow a perfect copy of the photo arrives intact. Without even knowing it, we use public-key cryptography to transmit secret information like credit card numbers, and we use digital signatures to verify the identity of the websites we visit. How do our computers perform these

tasks with such ease? John MacCormick answers this question in language anyone can understand, using vivid examples to explain the fundamental tricks behind nine computer algorithms that power our PCs, tablets, and smartphones.

Discrete optimization problems are everywhere, from traditional operations research planning (scheduling, facility location and network design); to computer science databases; to advertising issues in viral marketing. Yet most such problems are NP-hard; unless  $P = NP$ , there are no efficient algorithms to find optimal solutions. This book shows how to design approximation algorithms: efficient algorithms that find provably near-optimal solutions. The book is organized around central algorithmic techniques for designing approximation algorithms, including greedy and local search algorithms, dynamic programming, linear and semidefinite programming, and randomization. Each chapter in the first section is devoted to a single algorithmic technique applied to several different problems, with more sophisticated treatment in the second section. The book also covers methods for proving that optimization problems are hard to approximate. Designed as a textbook for graduate-level algorithm courses, it will also serve as a reference for researchers interested in the heuristic solution of discrete optimization problems.

REA ... Real review, Real practice, Real results. Get the college credits you deserve. AP ENGLISH LITERATURE & COMPOSITION with TESTware Includes CD with timed practice tests, instant scoring, and more. Completely aligned with today's AP exam Are you prepared to excel on the AP exam? \* Set up a study schedule by following our results-driven timeline \* Take the first practice test to discover what you know and what you should know \* Use REA's advice to ready yourself for proper study and success Practice for real \* Create the closest experience to test-day conditions with 3 of the book's 6 full-length practice tests on REA's TESTware CD, featuring test-taking against the clock, instant scoring by topic, handy mark-and-return function, pause function, and more. \* OR choose paper-and-pencil testing at your own pace \* Chart your progress with full and detailed explanations of all answers \* Boost your confidence with test-taking strategies and experienced advice Sharpen your knowledge and skills \* The book's full subject review features coverage of all AP English Literature and Composition areas: prose, poetry, drama and theater, verse and meter, types of poetry, plot structure, writing essays, and more \* Smart and friendly lessons reinforce necessary skills \* Key tutorials enhance specific abilities needed on the test \* Targeted drills increase comprehension and help organize study Ideal for Classroom or Solo Test Preparation! REA has provided advanced preparation for generations of advanced students who have excelled on important tests and in life. REA's AP study guides are teacher-recommended and written by experts who have mastered the course and the test.

"Fully revised for the new 2016 exam."--Cover.

Are high school advanced placement courses actually helping students prepare for college? AP: A Critical Examination of the Advanced Placement Program investigates whether AP classes effectively, economically, and equitably predict college success.

This updated manual presents computer science test takers with— Three AP practice tests for the Level A course, including a diagnostic test Charts detailing the topics for each test question All test questions answered and explained A subject review covers static variables, the List interface, Integer. MAX\_VALUE, and Integer. MIN\_VALUE. The practice exams contain several new questions on two-dimensional arrays and reflect the new free-response style used on the 2012 AP exam. This manual comes with a CD-ROM that has two more model AP exams with answers, explanations, automatic scoring for multiple-choice questions, and a scoring chart. BONUS ONLINE PRACTICE TEST: Students

who purchase this book or package will also get FREE access to one additional full-length online AP Computer Science A test with all questions answered and explained. System Requirements: This program will run on a PC with: 2.33GHz or faster x86-compatible processor, or Intel® Atom™, or 1.6GHz or faster processor for netbooks Microsoft® Windows® Server 2008, Windows Vista® Home Premium, Business, Ultimate, or Enterprise (including 64 bit editions) with Service Pack 2, Windows 7, or Windows 8 Classic 512MB of RAM (1GB of RAM recommended) This program will run on a Mac® with: Intel Core™, or Duo 1.83GHz or faster processor Mac OS X v10.6, v10.7, v10.8, or v10.9 512MB of RAM (1GB of RAM recommended)

Always study with the most up-to-date prep! Look for AP Computer Science Principles Premium with 6 Practice Tests, ISBN 9781506280400, on sale February 02, 2021. Publisher's Note: Products purchased from third-party sellers are not guaranteed by the publisher for quality, authenticity, or access to any online entitles included with the product.

Make sure you're studying with the most up-to-date prep materials! Look for the newest edition of this title, Princeton Review AP Computer Science A Prep, 2021 (ISBN: 9780525569497, on-sale August 2020). Publisher's Note: Products purchased from third-party sellers are not guaranteed by the publisher for quality or authenticity, and may not include access to online tests or materials included with the original product.

"Computer science has emerged as a key driver of innovation in the 21st century. Preparing teachers to teach computer science, however, remains an enormous challenge as there are few highly qualified teachers who can teach computer science or integrate computer science content into K-12 curricula. To address this challenge, NSF established the CS10K program with the aim of preparing 10,000 teachers in 10,000 high schools teaching computer science curricula. While this effort is still under-way, there has not been a systematic attempt to capture the work done in this area. In order to prepare a generation of teachers who are capable of delivering computer science content to students, we must identify research-based examples, pedagogical strategies and policies that can facilitate changes in teacher knowledge and practices. The purpose of this project is to provide examples that could help guide the design and delivery of effective teacher preparation on the teaching of computer science concepts. This book identifies promising pathways, pedagogical strategies and policies that help pre-service and in-service teachers infuse computing ideas in their curricula as well as teach stand-alone computing courses. The book focuses on pedagogical practices for developing and assessing pre-service teacher knowledge of computer science, course design models for pre-service teachers, and discussion of policies that can support the teaching of computer science. The primary audience of the book will be students and faculty in educational technology, educational or cognitive psychology, learning theory, curriculum and instruction, computer science, instructional systems and learning sciences"--

