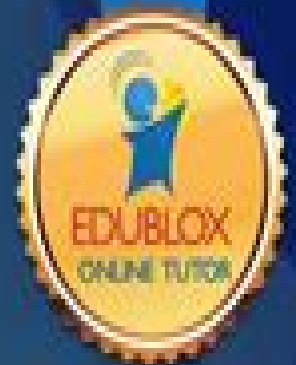


Eye movements in reading



A poor reader will be inclined to pause more often for fixations.

The duration of each fixation will also be longer.

Another difference lies in regressive movements.

Proponents of the phonological deficit theory believe that eye movement abnormalities seen in dyslexics are attributable to their language problems.

Other disagree as they found poor fixation control in dyslexics with or without poor phonological ability.

Eye Movements In Reading

Doris Borgstede



Eye Movements In Reading:

Eye Movements in Reading Keith Rayner, 2012-12-02 Eye Movements in Reading Perceptual and Language Processes focuses on eye movement and cognitive processes as a way to study the reading process This book also discusses the different aspects of reading Organized into seven parts encompassing 26 chapters this book begins with a discussion on the perceptual and psychophysical factors essential to eye movement during reading This book then explains how some psychophysical factors such as type size and masking affect the reading performance Other chapters consider the role of transient and sustained cells as well as their possible effects on reading This text also examines the size of the perceptual span in reading and the integration of information across eye movement Finally this book explains the eye movement abnormalities general eye movement parameters and the cognitive processes within the reading disabled group This book is a valuable resource to optometrists scientists field researchers and readers who are interested in the reading process

Eye Movements in Reading Strategies Christiane Wotschack, 2009 Throughout its empirical research history eye movement research has always been aware of the differences in reading behavior induced by individual differences and task demands This work introduces a novel comprehensive concept of reading strategy comprising individual differences in reading style and reading skill as well as reader goals In a series of sentence reading experiments recording eye movements the influence of reading strategies on reader and word level effects assuming distributed processing has been investigated Results provide evidence for strategic top down influences on eye movement control that extend our understanding of eye guidance in reading

Eye Movements in Reading Jan Ygge, Gunnar Lennerstrand, 1994-01-01 Hardbound Eye movements during reading were first described by the French ophthalmologist Emilo Javal in the late 19th century He reported that eyes do not move continuously along a line of text but make short rapid movements saccades intermingled with short stops fixations Javal's observations were based on visual observation only but today more sophisticated registration devices with which to study eye movements exist New techniques have enabled researchers to identify differences between eye movements during reading eye movements in response to suddenly appearing visual stimuli and scanning eye movements This information is especially valuable in the study of dyslexia a handicap estimated to affect up to 8% of the population of the western hemisphere This volume is based on a symposium held to draw together the knowledge available on modern techniques for eye movement recordings The edited chapters provide a valuable up to date account

Eye Guidance in Reading and Scene Perception G. Underwood, 1998-07-16 The distinguished contributors to this volume have been set the problem of describing how we know where to move our eyes There is a great deal of current interest in the use of eye movement recordings to investigate various mental processes The common theme is that variations in eye movements indicate variations in the processing of what is being perceived whether in reading driving or scene perception However a number of problems of interpretation are now emerging and this edited volume sets out to address these problems The book

investigates controversies concerning the variations in eye movements associated with reading ability concerning the extent to which text is used by the guidance mechanism while reading concerning the relationship between eye movements and the control of other body movements the relationship between what is inspected and what is perceived and concerning the role of visual control attention in the acquisition of complex perceptual motor skills in addition to the nature of the guidance mechanism itself The origins of the volume are in discussions held at a meeting of the European Society for Cognitive Psychology ESCOP that was held in Wurzburg in September 1996 The discussions concerned the landing effect in reading an effect that if substantiated would provide evidence of the use of parafoveal information in eye guidance and these discussions were explored in more detail at a small meeting in Chamonix in February 1997 Many of the contributors to this volume were present at the meeting but the arguments were not resolved in Chamonix either Other leaders in the field were invited to contribute to the discussion and this volume is the product The argument remains unresolved but the problem is certainly clearer

Eye Movements in Reading as Rational Behavior Klinton Bicknell, 2011 Moving one's eyes while reading is one of the most complex everyday tasks humans face To perform efficiently readers must make decisions about when and where to move their eyes every 200-300ms Over the past decades it has been demonstrated that these fine grained decisions are influenced by a range of linguistic properties of the text and measuring eye movements during reading has become one of the primary methods of studying online sentence comprehension However it is still largely unclear why linguistic variables affect the eye movement record in the ways they do The present work begins to answer this question by presenting a rational framework for understanding eye movement control in reading in which probabilistic language knowledge plays a crucial role Specifically the task of reading is taken to be one of sentence identification readers move their eyes to efficiently obtain visual input which they combine with probabilistic language knowledge through Bayesian inference to yield posterior beliefs about sentence form and structure Simulations with implemented models within this framework demonstrate that it can provide a principled account of many aspects of reading behavior including the influence of a number of linguistic variables In addition the framework suggests a novel explanation for one of the least understood aspects of eye movements in reading regressive eye movements and we present evidence from an eye tracking corpus to support this proposal The dissertation citations contained here are published with the permission of ProQuest llc Further reproduction is prohibited without permission Copies of dissertations may be obtained by Telephone 800 1 800 521 0600 Web page <http://www.proquest.com/en-US/products/dissertations/individuals.shtml>

[The Role of Eye Movements in Reading with an Evaluation of Techniques for Their Improvement](#) Francis Pleasant Robinson, 1933

Eye Movements and Information Processing During Reading Ralph Radach, Alan Kennedy, Keith Rayner, 2004 Measurement and analysis of eye movements are two of the most powerful ways to study the workings of the human mind This Special Issue on eye movements and information processing in reading presents an overview of experimental research based on this methodology Eye movements provide a unique opportunity to examine

principles of human information processing in a well structured visual environment while people engage in a natural cognitive task At the same time oculomotor measures can be used as a tool to develop and test psycholinguistic hypotheses about the processing of written language The papers in this issue contribute to both aspects addressing issues that dominate current debates in the field Seen from the angle of visual information processing a major theme is the role played by parafoveal information for different types and levels of processing and for oculomotor control in reading This includes effects of visual and linguistic word properties on the selection of words for fixation and the specification of saccade amplitudes Clearly the most controversial question in this context concerns the allocation of attention with positions ranging from a sequentially moving spotlight to a gradient of spatially distributed processing Related to this is the issue of serial vs parallel word processing and the fundamental question as to what extent the duration of fixations in reading is related to lexical processing Taking a psycholinguistic perspective the topics addressed include several levels of language processing from orthography to pragmatic information in sentence reading New approaches to the study of morphologically complex words are reported together with novel work revealing the complex nature of the apparently accessible but elusive concept of word frequency Other papers reflect current theoretical discussions centered on the development of computational models of the reading process and contribute to the empirical base of these discussions Taken together this collection of papers supplemented by an introduction to the field and a commentary on major issues presents a comprehensive and up to date perspective on a research area currently characterised by numerous theoretical and empirical disputes The papers will be of particular appeal to readers interested in basic and applied psycholinguistics attention and visual perception motor control and the modelling of complex cognitive processes

Cognitive and Cultural Influences on Eye Movements Keith Rayner, Deli Shen, Xuejun Bai, Guoli Yan, 2023-05-31 It is well known that cognitive variables influence eye movements during reading To what extent do cultural differences influence eye movements This volume contains chapters that examine these two issues The first half of the volume documents recent research findings with respect to models of eye movement control in reading eye movements and visual processing and eye movements during scene perception search and mental rotation The second half of the volume deals with two main cultural issues eye movements in reading Chinese and cultural influences on eye movements A number of experts provide overviews of their research findings concerning the topics in the five sections of the volume Readers interested in eye movements in reading cognitive influences on eye movements and cultural influences on eye movements will find the chapters valuable reading ISBN 978 7 201 06107 8

The Role of Eye Movements in Reading with an Evaluation of Techniques for Their Improvement, by Francis P. Robinson, ... Francis Pleasant Robinson, 1933 An Experimental Study of Legibility, Perception, and Eye Movement in the Reading of Formulae ... Miles Albert Tinker, 1927 Methods Manual for Improving Your Eye Movements in Reading Clement Henry Sievers, Bertha Dorothy Brown, 1940 EYE MOVEMENTS AND THE FUNDAMENTAL READING PROCESS Stanford E. Taylor, 2013-09-01 The purpose of this

book is multifaceted it is primarily dedicated to exploring the nature of the Fundamental Reading Process and to discussing the manner in which proficiency in these basic skills can be evaluated through eye movement recording Major topics include the history of eye movement recording exploring eye movement recording through the use of the Visagraph Eye Movement Recording system uses of eye movements in terms of reading appraisal field use of the Visagraph system by schools clinics and optometrists Visagraph EyeLink comparison in terms of eye movement data and the 2012 Visagraph Norm Study Report Reading and tutoring centers will be very interested in both the diagnostic eye movement recording techniques as well as the web based practice techniques available through computer technology Reading researchers will also be intrigued by the comprehensive description of the silent reading process as well as the effect on the oral reading process with the development of proficiency in silent reading Especially helpful is the information revealed through eye movement recordings about the many subliminal factors involved in the process of reading as well as the changes produced by today s web based computer techniques to modify the basic visual functional perceptual and information processing skills that comprise the silent reading process In addition the book will serve as a resource for graduate courses that cover what occurs during silent reading and what outcomes are possible with current reading practice programs using web based computer technology This unique text is essential reading for all who want to understand the role of the eye in silent reading and want to increase their instructional capability as teachers and remediation specialists

The Role of Habit in Eye-movements in Reading Earl

Donald Sisson,1938 *Eye Movements in Reading* Stanford Earl Taylor,1963 **Controlled eye movements versus**

practice exercises in reading Frederick Lowell Westover,1946 **Predicting Eye Movements in Reading** Peter

Dunn-Rankin,University of Hawaii. Department of Information and Computer Science,1986*

An Experiment in

Improving Eye-movements in Reading Doris Borgstede,1940 **The Role of Eye Movements in Reading with an**

Evaluation of Techiques for Their Improvement Francis Pleasant Robinson,1932 **Observations on Eye Movements**

During Scanning and Reading Ashby Christopher Jones,1984 Cognitive and Cultural Influences on Eye Movements

,2023 It is well known that cognitive variables influence eye movements during reading To what extent do cultural differences influence eye movements This volume contains chapters that examine these two issues The first half of the volume documents recent research findings with respect to models of eye movement control in reading eye movements and visual processing and eye movements during scene perception search and mental rotation The second half of the volume deals with two main cultural issues eye movements in reading Chinese and cultural influences on eye movements A number of experts provide overviews of their research findings concerning the topics in the five sections of the volume Readers interested in eye movements in reading cognitive influences on eye movements and cultural influences on eye movements will find the chapters valuable reading ISBN 978 7 201 06107 8

If you ally habit such a referred **Eye Movements In Reading** books that will give you worth, acquire the categorically best seller from us currently from several preferred authors. If you want to funny books, lots of novels, tale, jokes, and more fictions collections are afterward launched, from best seller to one of the most current released.

You may not be perplexed to enjoy all book collections Eye Movements In Reading that we will unquestionably offer. It is not concerning the costs. Its just about what you compulsion currently. This Eye Movements In Reading, as one of the most in force sellers here will totally be in the course of the best options to review.

<http://industrialmatting.com/public/Resources/default.aspx/field%20guide%20to%20microsoft%20access%202%20for%20windows.pdf>

Table of Contents Eye Movements In Reading

1. Understanding the eBook Eye Movements In Reading
 - The Rise of Digital Reading Eye Movements In Reading
 - Advantages of eBooks Over Traditional Books
2. Identifying Eye Movements In Reading
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Eye Movements In Reading
 - User-Friendly Interface
4. Exploring eBook Recommendations from Eye Movements In Reading
 - Personalized Recommendations
 - Eye Movements In Reading User Reviews and Ratings
 - Eye Movements In Reading and Bestseller Lists

5. Accessing Eye Movements In Reading Free and Paid eBooks
 - Eye Movements In Reading Public Domain eBooks
 - Eye Movements In Reading eBook Subscription Services
 - Eye Movements In Reading Budget-Friendly Options
6. Navigating Eye Movements In Reading eBook Formats
 - ePub, PDF, MOBI, and More
 - Eye Movements In Reading Compatibility with Devices
 - Eye Movements In Reading Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Eye Movements In Reading
 - Highlighting and Note-Taking Eye Movements In Reading
 - Interactive Elements Eye Movements In Reading
8. Staying Engaged with Eye Movements In Reading
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Eye Movements In Reading
9. Balancing eBooks and Physical Books Eye Movements In Reading
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Eye Movements In Reading
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Eye Movements In Reading
 - Setting Reading Goals Eye Movements In Reading
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Eye Movements In Reading
 - Fact-Checking eBook Content of Eye Movements In Reading
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning

- Utilizing eBooks for Skill Development
- Exploring Educational eBooks

14. Embracing eBook Trends

- Integration of Multimedia Elements
- Interactive and Gamified eBooks

Eye Movements In Reading Introduction

In today's digital age, the availability of Eye Movements In Reading books and manuals for download has revolutionized the way we access information. Gone are the days of physically flipping through pages and carrying heavy textbooks or manuals. With just a few clicks, we can now access a wealth of knowledge from the comfort of our own homes or on the go. This article will explore the advantages of Eye Movements In Reading books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of Eye Movements In Reading books and manuals for download is the cost-saving aspect. Traditional books and manuals can be costly, especially if you need to purchase several of them for educational or professional purposes. By accessing Eye Movements In Reading versions, you eliminate the need to spend money on physical copies. This not only saves you money but also reduces the environmental impact associated with book production and transportation. Furthermore, Eye Movements In Reading books and manuals for download are incredibly convenient. With just a computer or smartphone and an internet connection, you can access a vast library of resources on any subject imaginable. Whether you're a student looking for textbooks, a professional seeking industry-specific manuals, or someone interested in self-improvement, these digital resources provide an efficient and accessible means of acquiring knowledge. Moreover, PDF books and manuals offer a range of benefits compared to other digital formats. PDF files are designed to retain their formatting regardless of the device used to open them. This ensures that the content appears exactly as intended by the author, with no loss of formatting or missing graphics. Additionally, PDF files can be easily annotated, bookmarked, and searched for specific terms, making them highly practical for studying or referencing. When it comes to accessing Eye Movements In Reading books and manuals, several platforms offer an extensive collection of resources. One such platform is Project Gutenberg, a nonprofit organization that provides over 60,000 free eBooks. These books are primarily in the public domain, meaning they can be freely distributed and downloaded. Project Gutenberg offers a wide range of classic literature, making it an excellent resource for literature enthusiasts. Another popular platform for Eye Movements In Reading books and manuals is Open Library. Open Library is an initiative of the Internet Archive, a non-profit organization dedicated to digitizing cultural artifacts and making them accessible to the public. Open Library hosts millions of books, including both public domain works and contemporary titles. It also allows users to borrow digital copies of certain

books for a limited period, similar to a library lending system. Additionally, many universities and educational institutions have their own digital libraries that provide free access to PDF books and manuals. These libraries often offer academic texts, research papers, and technical manuals, making them invaluable resources for students and researchers. Some notable examples include MIT OpenCourseWare, which offers free access to course materials from the Massachusetts Institute of Technology, and the Digital Public Library of America, which provides a vast collection of digitized books and historical documents. In conclusion, Eye Movements In Reading books and manuals for download have transformed the way we access information. They provide a cost-effective and convenient means of acquiring knowledge, offering the ability to access a vast library of resources at our fingertips. With platforms like Project Gutenberg, Open Library, and various digital libraries offered by educational institutions, we have access to an ever-expanding collection of books and manuals. Whether for educational, professional, or personal purposes, these digital resources serve as valuable tools for continuous learning and self-improvement. So why not take advantage of the vast world of Eye Movements In Reading books and manuals for download and embark on your journey of knowledge?

FAQs About Eye Movements In Reading Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer webbased readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Eye Movements In Reading is one of the best book in our library for free trial. We provide copy of Eye Movements In Reading in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Eye Movements In Reading. Where to download Eye Movements In Reading online for free? Are you looking for Eye Movements In Reading PDF? This is definitely going to save you time and cash in something you should think about. If you trying to find then search around for online. Without a doubt there are numerous these available and many of them have the freedom. However without doubt you receive whatever you purchase. An alternate way to get ideas is always to check another Eye Movements In Reading. This method for see exactly

what may be included and adopt these ideas to your book. This site will almost certainly help you save time and effort, money and stress. If you are looking for free books then you really should consider finding to assist you try this. Several of Eye Movements In Reading are for sale to free while some are payable. If you arent sure if the books you would like to download works with for usage along with your computer, it is possible to download free trials. The free guides make it easy for someone to free access online library for download books to your device. You can get free download on free trial for lots of books categories. Our library is the biggest of these that have literally hundreds of thousands of different products categories represented. You will also see that there are specific sites catered to different product types or categories, brands or niches related with Eye Movements In Reading. So depending on what exactly you are searching, you will be able to choose e books to suit your own need. Need to access completely for Campbell Biology Seventh Edition book? Access Ebook without any digging. And by having access to our ebook online or by storing it on your computer, you have convenient answers with Eye Movements In Reading To get started finding Eye Movements In Reading, you are right to find our website which has a comprehensive collection of books online. Our library is the biggest of these that have literally hundreds of thousands of different products represented. You will also see that there are specific sites catered to different categories or niches related with Eye Movements In Reading So depending on what exactly you are searching, you will be able to choose ebook to suit your own need. Thank you for reading Eye Movements In Reading. Maybe you have knowledge that, people have search numerous times for their favorite readings like this Eye Movements In Reading, but end up in harmful downloads. Rather than reading a good book with a cup of coffee in the afternoon, instead they juggled with some harmful bugs inside their laptop. Eye Movements In Reading is available in our book collection an online access to it is set as public so you can download it instantly. Our digital library spans in multiple locations, allowing you to get the most less latency time to download any of our books like this one. Merely said, Eye Movements In Reading is universally compatible with any devices to read.

Find Eye Movements In Reading :

~~field guide to microsoft access 2 for windows~~

feudal england. historical studies on the eleventh and twelfth centuries

fighter general life of adolf galland

fifth symposium on the structure of low-medium mass nuclei.

fight against fears an intimate account of a womans psychoanalysis

~~fiber bran better health cookbook~~

fiend folio tome of creatures malevolent and benign advanced dungeons and dragons adventure games

fiat 600 mulitpla

fiber crops.

fey the rival

fetal growth in humans

fiction 1876-1983 bibliography of united states editions

field epidemiology

fiction writers market 198384

fighting back the politics of the unemployed in victoria in the great depression

Eye Movements In Reading :

A.P. Calculus AB Student Manual This manual was developed for a typical Advanced Placement Calculus course by Stu Schwartz over the years 1998 - 2005. The student manual is free of charge ... AB Calculus Manual (Revised 12/2019) I show the thought process involved in solving calculus problems. The solutions are the same that appear in the solution manual, but these are explained audibly ... bu ready for some calculus? BU READY FOR SOME. CALCULUS? developed by. Stu Schwartz. A Precalculus Review ... There are certain graphs that occur all the time in calculus and students should ... Calculus: Ripped from the Headlines Want to see a sample of Calculus: Ripped From the Headlines? Click here. Who Wrote it: CRFH was written entirely by Stu Schwartz of MasterMathMentor.com. MasterMath Mentor AB0102 - Intro to Calculus / Tangent line ... BechniVues of 4ifferentiation - Classwork Taking derivatives is a a process that is vital in calculus. ... www.MasterMathMentor.com AB Solutions l 39 l. Stu Schwartz. Techniques of Differentiation ... MasterMathMentor AB30 - Fundamental Theorem of Calculus MasterMathMentor Video Introduction - YouTube MasterMathMentor AB15 - Continuity and Differentiability Stu Schwartz Calculus Answers - Fill Online, Printable ... Stu Schwartz is a math teacher and author known for his comprehensive calculus materials. Stu Schwartz's calculus answers consist of solutions to calculus ... SAMHSA's National Helpline Jun 9, 2023 — SAMHSA's National Helpline is a free, confidential, 24/7, 365-day-a-year treatment referral and information service (in English and Spanish) ... Staying Sober: A Guide for Relapse Prevention Mr. Gorski is the author of numerous books, audio, and video tapes, including Passages Through Recovery -- An Action Plan for Preventing Relapse, Staying Sober ... Hazelden Store: Staying Sober In Staying Sober the authors discuss addictive disease and its physical, psychological, and social effects. They also identify sobriety-based symptoms, ... Staying Sober: A Guide for Relapse Prevention Staying Sober explains addictive disease, Post Acute Withdrawal (PAW), recovery and partial recovery, mistaken beliefs about recovery and relapse, the relapse ... Staying Sober Terence Gorski Sober On A Drunk Planet: 3 Sober Steps. An Uncommon Guide To Stop Drinking and Master Your Sobriety (Quit Lit Sobriety Series). by Sean Alexander.

Staying Sober: A Guide for Relapse Prevention Read 18 reviews from the world's largest community for readers. Very good. Scuffed edges and some on cover. Small crease across back upper corner. Few dog-... Staying Sober: A Guide for Relapse Prevention CEU course for Addiction Counselors and Social Workers Staying Sober A Guide for Relapse Prevention; This book is a great resource for understanding and ... Staying sober : a guide for relapse prevention. Staying sober : a guide for relapse prevention. Gorski, Terence T. (Author). Miller, Merlene. (Added ... List of books by author Terence T. Gorski Staying Sober: A Guide for Relapse Prevention 083090459X Book Cover · Passages Through Recovery: An Action Plan for Preventing Relapse 1568381395 Book Cover. Staying sober : a guide for relapse prevention Staying sober : a guide for relapse prevention Available at Andrew L. Bouwhuis Library Book Shelves (RC565 .G68 1986) ... Algebra 2 Answers : r/edgenuity i JUST finished alg 2 & got most my answers from brainly & quizlet & sometimes just randomly on the internet. it was so easy. i finished in like ... unit test answers edgenuity algebra 2 Discover videos related to unit test answers edgenuity algebra 2 on TikTok. Algebra II This course focuses on functions, polynomials, periodic phenomena, and collecting and analyzing data. Students begin with a review of linear and quadratic ... edgenuity algebra 2 test answers Discover videos related to edgenuity algebra 2 test answers on TikTok. Edgenuity Algebra 2 Semester 2 Answers Pdf Edgenuity Algebra 2 Semester 2 Answers Pdf. INTRODUCTION Edgenuity Algebra 2 Semester 2 Answers Pdf FREE. Unit 1 test review algebra 2 answers edgenuity unit 1 test review algebra 2 answers edgenuity. Edgenuity geometry final exam answers - Geometry final exam Flashcards. Algebra 2 Edgenuity Answers Answers to edgenuity math algebra 2; Edgenuity answer key algebra 2 pdf; Edgenuity ... Answers Algebra 2 Edgenuity E2020 Answers Algebra 2 When somebody should ... Algebra 2: Welcome to Edgenuity! - YouTube Edgenuity Common Core Algebra 2 . Answer Read Free Edgenuity Answers Algebra 2 Edgenuity Answers Algebra 2 Algebra 2 Algebra 1 Common Core Student Edition Grade 8/9 ... Common Core Algebra II - MA3111 A-IC QTR 1 Sep 11, 2018 — Common Core Algebra II - MA3111 A-IC QTR 1. Relationships Between Quantities. Real Numbers. Warm-Up. Get ready for the lesson. Instruction.