

PRINCIPLES OF ENGINEERING ECONOMIC ANALYSIS

WHITE | CASE | PRATT

Saxth Edition



Principles Of Engineering Economic Analysis 6th Editionl

William D. Callister, David G. Rethwisch

Principles Of Engineering Economic Analysis 6th Editionl:

Principles of Engineering Economic Analysis John A. White, Kenneth E. Case, David B. Pratt, 2012-10-16 This text is an unbound binder ready edition Principles of Engineering Economic Analysis 6th edition teaches engineers to properly and methodically evaluate their work on an economic basis and to convey it effectively to those who have the power to say yea or nay The 6th edition is updated and expanded to be comprehensive and flexible it includes all standard topics plus stronger coverage of more advanced analysis techniques than other books with the most thorough integration and guidance for spreadsheet use The text provides a unified treatment of economic analysis principles and techniques from a cash flow perspective a proven classroom approach that is very successful in practice Chapter opening stories about well known companies engineering and personal finance examples throughout the text and external web resources help motivate students FE Like problems at the end of each chapter give students practice with the kinds of problems they ll encounter on the FE exam The 6th edition provides students and instructors the latest tax information and up to date company and industry information in the chapter opening stories reflecting changes resulting from the recent tumult in the economy so that students can work with the most current and relevant information Principles of Engineering Economic Analysis, 6th Edition, Wiley E-Text Reg Card White, 2013-02-11 Principles of Engineering Economic Analysis John A. White, Marvin H. Agee, Kenneth E. Case, 1989-01-31 A new edition of the widely used engineering economics text Employs a cash flow approach to economic theory and prepares the reader to systematically perform economic justification of capital investments in a real world setting Stresses learning by example with real life cases Updated and revised to reflect current practice covering before and after tax analyses and cost of capital including the effects of inflation on capital investment public sector economics Principles of Engineering Economic Analysis 6e + WileyPLUS Registration Card John A. White, 2012-04-30 This package includes a copy of ISBN 9781118163832 and a registration code for the WileyPLUS course associated with the text Before you purchase check with your instructor or review your course syllabus to ensure that your instructor requires WileyPLUS For customer technical support please visit http www wileyplus com support WileyPLUS registration cards are only included with new products Used and rental products may not include WileyPLUS registration cards Principles of Engineering Economic Analysis 6th edition teaches engineers to properly and methodically evaluate their work on an economic basis and to convey it effectively to those who have the power to say yea or nay The 6th edition is updated and expanded to be comprehensive and flexible it includes all standard topics plus stronger coverage of more advanced analysis techniques than other books with the most thorough integration and guidance for spreadsheet use The text provides a unified treatment of economic analysis principles and techniques from a cash flow perspective a proven classroom approach that is very successful in practice Chapter opening stories about well known companies engineering and personal finance examples throughout the text and external web resources help motivate students FE Like problems at the end of each chapter give

students practice with the kinds of problems they ll encounter on the FE exam The 6th edition provides students and instructors the latest tax information and up to date company and industry information in the chapter opening stories reflecting changes resulting from the recent tumult in the economy so that students can work with the most current and relevant information Fundamentals of Engineering Economic Analysis John A. White, Kellie S. Grasman, Kenneth E. Case, Kim LaScola Needy, David B. Pratt, 2020-07-28 Fundamentals of Engineering Economic Analysis offers a powerful visually rich approach to the subject delivering streamlined yet rigorous coverage of the use of economic analysis techniques in engineering design This award winning textbook provides an impressive array of pedagogical tools to maximize student engagement and comprehension including learning objectives key term definitions comprehensive case studies classroom discussion questions and challenging practice problems Clear topically organized chapters guide students from fundamental concepts of borrowing lending investing and time value of money to more complex topics such as capitalized and future worth external rate of return deprecation and after tax economic analysis This fully updated second edition features substantial new and revised content that has been thoroughly re designed to support different learning and teaching styles Numerous real world vignettes demonstrate how students will use economics as practicing engineers while plentiful illustrations such as cash flow diagrams reinforce student understanding of underlying concepts Extensive digital resources now provide an immersive interactive learning environment enabling students to use integrated tools such as Excel The addition of the WileyPLUS platform provides tutorials videos animations a complete library of Excel video lessons and much Principles of Engineering Economic Analysis Andrew J. Szonyi,2000-01-01 **Fundamentals of Economics for** more **Applied Engineering** S. Kant Vajpayee, MD Sarder, 2019-08-02 An easy to follow contemporary engineering economics text that helps making sound economic decisions without advanced mathematics. This one semester introduction to the fundamentals of engineering economics provides an overview of the basic theory and mathematics underlying operational business decisions that engineering technology engineering and industrial technology students will face in the workplace A basic knowledge of economics empowers a manager to balance costs with production This new edition of Fundamentals of Economics for Engineering Technologists and Engineers is written in plain language Concepts have been simplified and kept straightforward with an emphasis on how to apply economic principles Practical examples as a tool for managing business data and giving detailed analysis of business operations throughout the text make good use of Microsoft Excel templates provided on the book s companion website for students Chapter end exercises provide discussion and multiple choice questions along with numerical problems and a solutions manual and instructor resources is given for adopting instructors

Principles of Engineering Economic Analysis Pratt,1997-12-01 Fundamentals of Materials Science and Engineering William D. Callister, David G. Rethwisch, 2022 Fundamentals of Materials Science and Engineering provides a comprehensive coverage of the three primary types of materials metals ceramics and polymers and composites Adopting an

integrated approach to the sequence of topics the book focuses on the relationships that exist between the structural elements of materials and their properties This presentation permits the early introduction of non metals and supports the engineer's role in choosing materials based upon their characteristics. Using clear concise terminology that is familiar to students the book presents material at an appropriate level for student comprehension This International Adaptation has been thoroughly updated to use SI units This edition enhances the coverage of failure mechanism by adding new sections on Griffith theory of brittle fracture Goodman diagram and fatigue crack propagation rate It further strengthens the coverage by including new sections on peritectoid and monotectic reactions spinodal decomposition and various hardening processes such as surface and vacuum and plasma hardening In addition all homework problems requiring computations have been Principles of Engineering Economic Analysis White, 1989-02-01 WileyPlus Blackboard Card for Principles of refreshed Engineering Economic Analysis, 6th Edition, White, 2012-07-05 Fundamentals of Materials Science and Engineering William D. Callister, Jr., David G. Rethwisch, 2012 This text treats the important properties of the three primary types of materials metals ceramics and polymers as well as composites and the relationships that exist between the structural elements of these materials and their properties Emphasis is placed on mechanical behavior and failure including techniques that are employed to improve the mechanical and failure characteristics in terms of alteration of structural elements Furthermore individual chapters discuss each of corrosion electrical thermal magnetic and optical properties New and cutting edge materials are also discussed Even if an instructor does not have a strong materials background i e is from mechanical civil chemical or electrical engineering or chemistry departments he or she can easily teach from this text The material is not at a level beyond which the students can comprehend an instructor would not have to supplement in order to bring the students up to the level of the text Also the author has attempted to write in a concise clear and organized manner using terminology that is familiar to the students Extensive student and instructor resource supplements are also provided Design and Optimization of Thermal Systems, Third Edition Yogesh Jaluria, 2019-09-06 Design and Publisher s description Optimization of Thermal Systems Third Edition with MATLAB Applications provides systematic and efficient approaches to the design of thermal systems which are of interest in a wide range of applications It presents basic concepts and procedures for conceptual design problem formulation modeling simulation design evaluation achieving feasible design and optimization Emphasizing modeling and simulation with experimentation for physical insight and model validation the third edition covers the areas of material selection manufacturability economic aspects sensitivity genetic and gradient search methods knowledge based design methodology uncertainty and other aspects that arise in practical situations This edition features many new and revised examples and problems from diverse application areas and more extensive coverage of analysis and simulation with MATLAB Principles of Engineering Economic Analysis (Canadian Edition) Andrew J. Szonyi, Robert G. Fenton, John A. White, Marvin H. Agee, Kenneth E. Case, 1989 The Civil Engineering Handbook W.F. Chen, J.Y. Richard

Liew, 2002-08-29 Providing extensive coverage of all major areas of civil engineering the second edition of this award winning handbook features contributions from leading professionals and academicians and is packed with formulae data tables and definitions vignettes on topics of recent interest and additional sources of information It includes a wealth of material in areas such as coastal engineering polymeric materials computer methods shear stresses in beams and pavement performance evaluation Its wide range of information makes it an essential resource for anyone working in civil structural or **Pollution Prevention** Ryan Dupont, Kumar Ganesan, Louis Theodore, 2016-11-18 This new environmental engineering edition has been revised throughout and adds several sections including lean manufacturing and design for the environment low impact development and green infrastructure green science and engineering and sustainability It presents strategies to reduce waste from the source of materials development through to recycling and examines the basic concepts of the physical chemical and biological properties of different pollutants It includes case studies from several industries such as pharmaceuticals pesticides metals electronics petrochemicals refineries and more It also addresses the economic considerations for each pollution prevention approach **Petroleum Economics and Engineering, Second Edition M.A.** Al-Sahlawi, 1992-01-22 Revised and updated to reflect major changes in the field this second edition presents an integrated and balanced view of current attitudes and practices used in sound economic decision making for engineering problems encountered in the oil industry. The volume contains many problem solving examples demonstrating how economic analyses are applied to different facets of the oil industry Discussion progresses from an introduction to the industry through principles and techniques of engineering economics to the application of economic methods to the oil industry. It provides information on the types of crude oils their finished products and resources of natural gas and also summarizes worldwide oil production and consumption data Official Gazette Philippines, 2008 Process Engineering Economics James Riley Couper, 2003-08-26 This reference outlines the fundamental concepts and strategies for economic assessments for informed management decisions in industry The book illustrates how to prepare capital cost and operating expense estimates profitability analyses and feasibility studies and how to execute sensitivity and uncertainty assessments From financial reports to opportunity costs and engineering trade offs Process Engineering Economics considers a wide range of alternatives for profitable investing and for projecting outcomes in various chemical and engineering fields It also explains how to monitor costs finances and economic limitations at every stage of chemical project design preparation and evaluation

Economic Analysis for Engineers and Managers J. C. Sprague, J. D. Whittaker, 1986

Decoding **Principles Of Engineering Economic Analysis 6th Editionl**: Revealing the Captivating Potential of Verbal Expression

In an era characterized by interconnectedness and an insatiable thirst for knowledge, the captivating potential of verbal expression has emerged as a formidable force. Its power to evoke sentiments, stimulate introspection, and incite profound transformations is genuinely awe-inspiring. Within the pages of "**Principles Of Engineering Economic Analysis 6th Editionl**," a mesmerizing literary creation penned by way of a celebrated wordsmith, readers attempt an enlightening odyssey, unraveling the intricate significance of language and its enduring effect on our lives. In this appraisal, we shall explore the book is central themes, evaluate its distinctive writing style, and gauge its pervasive influence on the hearts and minds of its readership.

https://hersolutiongelbuy.com/data/publication/default.aspx/Solution%20Manual%20For%20Measurements%20And%20Instrumentation%20Principles.pdf

Table of Contents Principles Of Engineering Economic Analysis 6th Editionl

- 1. Understanding the eBook Principles Of Engineering Economic Analysis 6th Editionl
 - The Rise of Digital Reading Principles Of Engineering Economic Analysis 6th Editionl
 - Advantages of eBooks Over Traditional Books
- 2. Identifying Principles Of Engineering Economic Analysis 6th Editionl
 - 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 Principles Of Engineering Economic Analysis 6th Editionl
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from Principles Of Engineering Economic Analysis 6th Editionl

- Personalized Recommendations
- Principles Of Engineering Economic Analysis 6th Editionl User Reviews and Ratings
- Principles Of Engineering Economic Analysis 6th Editionl and Bestseller Lists
- 5. Accessing Principles Of Engineering Economic Analysis 6th Editionl Free and Paid eBooks
 - Principles Of Engineering Economic Analysis 6th Editionl Public Domain eBooks
 - Principles Of Engineering Economic Analysis 6th Editionl eBook Subscription Services
 - Principles Of Engineering Economic Analysis 6th Editionl Budget-Friendly Options
- 6. Navigating Principles Of Engineering Economic Analysis 6th Editionl eBook Formats
 - o ePub, PDF, MOBI, and More
 - Principles Of Engineering Economic Analysis 6th Editionl Compatibility with Devices
 - Principles Of Engineering Economic Analysis 6th Editionl Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Principles Of Engineering Economic Analysis 6th Editionl
 - Highlighting and Note-Taking Principles Of Engineering Economic Analysis 6th Editionl
 - Interactive Elements Principles Of Engineering Economic Analysis 6th Editionl
- 8. Staying Engaged with Principles Of Engineering Economic Analysis 6th Editionl
 - o Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Principles Of Engineering Economic Analysis 6th Editionl
- 9. Balancing eBooks and Physical Books Principles Of Engineering Economic Analysis 6th Editionl
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Principles Of Engineering Economic Analysis 6th Editionl
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Principles Of Engineering Economic Analysis 6th Editionl
 - Setting Reading Goals Principles Of Engineering Economic Analysis 6th Editionl
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Principles Of Engineering Economic Analysis 6th Editionl

- Fact-Checking eBook Content of Principles Of Engineering Economic Analysis 6th Editionl
- 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

Principles Of Engineering Economic Analysis 6th Editionl Introduction

In this digital age, the convenience of accessing information at our fingertips has become a necessity. Whether its research papers, eBooks, or user manuals, PDF files have become the preferred format for sharing and reading documents. However, the cost associated with purchasing PDF files can sometimes be a barrier for many individuals and organizations. Thankfully, there are numerous websites and platforms that allow users to download free PDF files legally. In this article, we will explore some of the best platforms to download free PDFs. One of the most popular platforms to download free PDF files is Project Gutenberg. This online library offers over 60,000 free eBooks that are in the public domain. From classic literature to historical documents, Project Gutenberg provides a wide range of PDF files that can be downloaded and enjoyed on various devices. The website is user-friendly and allows users to search for specific titles or browse through different categories. Another reliable platform for downloading Principles Of Engineering Economic Analysis 6th Edition free PDF files is Open Library. With its vast collection of over 1 million eBooks, Open Library has something for every reader. The website offers a seamless experience by providing options to borrow or download PDF files. Users simply need to create a free account to access this treasure trove of knowledge. Open Library also allows users to contribute by uploading and sharing their own PDF files, making it a collaborative platform for book enthusiasts. For those interested in academic resources, there are websites dedicated to providing free PDFs of research papers and scientific articles. One such website is Academia.edu, which allows researchers and scholars to share their work with a global audience. Users can download PDF files of research papers, theses, and dissertations covering a wide range of subjects. Academia.edu also provides a platform for discussions and networking within the academic community. When it comes to downloading Principles Of Engineering Economic Analysis 6th Editionl free PDF files of magazines, brochures, and catalogs, Issuu is a popular choice. This digital publishing platform hosts a vast collection of publications from around the world. Users can search for specific titles or explore various categories and genres. Issuu offers a seamless reading experience with its user-friendly interface and allows users to

download PDF files for offline reading. Apart from dedicated platforms, search engines also play a crucial role in finding free PDF files. Google, for instance, has an advanced search feature that allows users to filter results by file type. By specifying the file type as "PDF," users can find websites that offer free PDF downloads on a specific topic. While downloading Principles Of Engineering Economic Analysis 6th Editionl free PDF files is convenient, its important to note that copyright laws must be respected. Always ensure that the PDF files you download are legally available for free. Many authors and publishers voluntarily provide free PDF versions of their work, but its essential to be cautious and verify the authenticity of the source before downloading Principles Of Engineering Economic Analysis 6th Editionl. In conclusion, the internet offers numerous platforms and websites that allow users to download free PDF files legally. Whether its classic literature, research papers, or magazines, there is something for everyone. The platforms mentioned in this article, such as Project Gutenberg, Open Library, Academia.edu, and Issuu, provide access to a vast collection of PDF files. However, users should always be cautious and verify the legality of the source before downloading Principles Of Engineering Economic Analysis 6th Editionl any PDF files. With these platforms, the world of PDF downloads is just a click away.

FAQs About Principles Of Engineering Economic Analysis 6th Editionl 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 web-based 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. Principles Of Engineering Economic Analysis 6th Editionl is one of the best book in our library for free trial. We provide copy of Principles Of Engineering Economic Analysis 6th Editionl in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Principles Of Engineering Economic Analysis 6th Editionl online for free? Are you looking for Principles Of Engineering Economic Analysis 6th Editionl PDF? This is definitely going to save you time and cash in something you should think about.

Find Principles Of Engineering Economic Analysis 6th Editionl:

solution manual for introductory functional
solution manual differential equation edwards
solution manual advanced accounting 11th edition
solution manual distributed operating system concept
solid state physics ashcroft solution
solution manual for managerial accounting 11th edition by warren
solution manual for larson 8th edition
solution manual for transportation traffic engineering
solution manual for applied combinatorics by alan tucker
solution manual company accounting hoggett 9th edition
solubility curve practice problems 1 graphing questions
solution manual for probability statistics engineers
solution manual computer security principles practice
solution manual for fundamentals of cost accounting 3rd edition

Principles Of Engineering Economic Analysis 6th Editionl:

Ditch Witch R-65 Trencher Parts Manual This parts catalog will provide detailed information on how to dismantle your machine through exploded views of the parts and components of your equipment ... Ditch Witch R-65 Trencher Parts Manual This Operation Instructions and Parts List manual has · been designed to provide you a quick. simple. easy-to-use · reference for ordering "Genuine DITCH WITCH ... Ditch Witch R-65 Trencher Chassis Operators Manual ... Ditch Witch R-65 Trencher Chassis Operators Manual Parts Catalog; Item Number. 255888136739; Compatible Equipment Make. Ditch Witch; Brand. Ditch Witch ... New Parts Manual for Ditch Witch R65 Tractor Chassis This Ditch Witch model R65 Tractor Parts Manual Trencher Chassis Only is a reproduction of the original factoryissued Parts ManualIt shows 34 pages of ... Ditch Witch Plow Parts Manual A-DW-P-R65COMBO Buy Ditch Witch Plow Parts Manual A-DW-P-R65COMBO, Part #A-DW-P-R65COMBO at Tired Iron Tractor Parts, we're experts in tractor restoration and repair. Ditch Witch R-65 Vibratory Plow Attachment Parts Manual Our Parts Manuals contains exploded views of your entire tractor or machine with parts listings and part numbers. This manual will never let you order ... Ditch Witch R-65 Trencher Wisconsin Engine Service Manual Written in the language

of a mechanic, this Service Manual for Ditch Witch provides detailed information on how to take your Trencher Wisconsin Engine apart, ... One New Operators & Parts Manual Fits Ditch Witch R-65 ... Buy One New Operators & Parts Manual Fits Ditch Witch R-65 Trencher Models Interchangeable with RAP70888: Spare & Replacement Parts - Amazon.com ☐ FREE ... New Parts Manual for Ditch Witch R-65 Tractor Chassis This Ditch Witch model R-65 Tractor Parts Manual (Trencher Chassis Only) is a reproduction of the original factory-issued Parts Manual. Ditch Witch Chassis Parts Manual A-DW-P-R65 34 pages -Ditch Witch R-65 TRENCHER CHASSIS ONLY Parts Manual (PTS); Pages: 34. Sections and Models: Manuals; Ditch Witch TRENCHER: R-65. Earth Science: The Physical Setting - 1st Edition - Solutions ... Our resource for Earth Science: The Physical Setting includes answers to chapter exercises, as well as detailed information to walk you through the process step ... Earth Science Review Answers | PDF Teachers Guide and Answer Key. Reviewing Earth Science The Physical Setting Third Edition Thomas McGuire. This CD contains answer keys for the Earth Science The Physical Setting Answer Key Fill Earth Science The Physical Setting Answer Key, Edit online. Sign, fax and printable from PC, iPad, tablet or mobile with pdfFiller ☐ Instantly. 6u!iias |B3!sAL|C| am The Answer Key for the Brief Review in Earth Science provides answers to all of the questions in the book, including the sample Regents Examinations ... Earth Science The Physical Setting Answer Key: Books Earth Science: Physical Setting, New York Regents Review Practice Tests with Answers and Explanations (Based on NYS Core Guide) 2009-2010 Edition. Earth Science: the Physical Setting: Answer Key 2005 Focusing on the Earth Science content tested on the Regents Examination, this thorough review guide contains extensive vocabulary, review questions, ... Earth Science: The Physical Setting Answer Key (Prentice ... Earth Science: The Physical Setting Answer Key (Prentice Hall Brief Review for the New York Regents Exam) by Prentice Hall - ISBN 10: 0133200353 - ISBN 13: ... Regents Exams and Answers: Earth Science--Physical ... Review questions grouped by topic, to help refresh skills learned in class; Thorough explanations for all answers; Score analysis charts to help identify ... Review Book: Earth Science: The Physical Setting (3 Edition) by T McGuire · Cited by 8 — Record your answers in your Review Book. Be prepared for homework guizzes. The dates for the assignments will be given in class. Earth Science: The Physical Setting (prentice Hall Brief ... Access Earth Science: The Physical Setting (Prentice Hall Brief Review For The New York Regents Exam) 1st Edition Chapter 2 solutions now. Chevrolet Venture Starter AutoZone's dependable starters rotate the engine between 85 and 150 RPMs and connect to high-amperage batteries so that engines can ignite. New Starter Compatible With 2001-2005 Chevy ... SPECIFICATIONS: 1.4kW/12 Volt, CW, 9-Tooth Pinion UNIT TYPE: PG260D PMGR SERIES: PG260D DESIGN: PMGR VOLTAGE: 12. KW: 1.4. ROTATION: CW NUMBER OF TEETH: 9 2003 Chevrolet Venture - Starter - O'Reilly Auto Parts ACDelco Starter - 337-1030 ... A starter is an electric motor that engages your flexplate to spin your engine on startup. It includes a bendix, which is a ... Chevrolet Venture Starter Low prices on Starter for your Chevrolet Venture at Advance Auto Parts. Find aftermarket and OEM parts online or at a local store near you. Chevrolet Venture Starter Motor New Starter 2003 CHEVROLET VENTURE

3.4L V6. \$5499. current price \$54.99. New ... Starter - Compatible with 1997 - 2005 Chevy Venture 3.4L V6 1998 1999 2000 2001 ... Starters for Chevrolet Venture for sale Get the best deals on Starters for Chevrolet Venture when you shop the largest online selection at eBay.com. Free shipping on many items | Browse your ... Starter - Chevy 2.2L, S10 2002-2003, Monte Carlo ... Starter for Chevy 2.2L, S10 2002-2003, Monte Carlo 3.4L Venture 410-12260; Item Condition, Aftermarket Part; Unit Type, Starter; Voltage, 12; Rotation, CW. New Starter 2003 CHEVROLET VENTURE 3.4L V6 This starter fits the following: 2003 CHEVROLET VENTURE 3.4L(207) V6 Replaces: AC DELCO 323-1429, 336-1931, 323-1447, 323-1626, 336-1931