Shear Tension And Compression

Katrin Zwirglmaier

Shear - definition of shear by The Free Dictionary 1. shave, fleece In the Hebrides they shear their sheep later than everyone else. Shear vs. Sheer: What's the Difference? - Grammarly Though shear and sheer sound the same, their meanings diverge significantly. Shear refers to cutting or force-induced displacement within materials, whereas sheer signifies extremity or ... shear - Wiktionary, the free dictionary Jun 27, 2025 · (mining, intransitive) To make a vertical cut in coal. (engineering) (also 'shear off') To break or suddenly separate because of excessive force, eg. a bolt. (Scotland) To reap, as ... Shear - Wikipedia Shear pin, in machinery, such as a plough, designed to shear (break) when a certain force is exceeded, to protect other components of the machine. SHEAR definition and meaning | Collins English Dictionary To shear a sheep means to cut its wool off. In the Hebrides they shear their sheep later than anywhere else. [VERB noun] SHEAR Definition & Meaning | Dictionary.com Shear definition: to cut (something). See examples of SHEAR used in a sentence. SHEAR | English meaning - Cambridge Dictionary SHEAR definition: 1. to cut the wool off a sheep: 2. to cut the hair on a person's head close to the skin.... Learn more. SHEAR Definition & Meaning - Merriam-Webster The meaning of SHEAR is to cut off the hair from. How to use shear in a sentence. shear verb - Definition, pictures, pronunciation and usage ... Definition of shear verb in Oxford Advanced Learner's Dictionary. Meaning, pronunciation, picture, example sentences, grammar, usage notes, synonyms and more. Shear Definition & Meaning | Britannica Dictionary SHEAR meaning: 1 : to cut the hair, wool, etc., off (an animal); 2 : to cut off (an animal's hair, wool, etc.) often + off

The Enigmatic Realm of **Shear Tension And Compression**: Unleashing the Language is Inner Magic

In a fast-paced digital era where connections and knowledge intertwine, the enigmatic realm of language reveals its inherent magic. Its capacity to stir emotions, ignite contemplation, and catalyze profound transformations is nothing lacking extraordinary. Within the captivating pages of **Shear Tension And Compression** a literary masterpiece penned by a renowned author, readers set about a transformative journey, unlocking the secrets and untapped potential embedded within each word. In this evaluation, we shall explore the book is core themes, assess its distinct writing style, and delve into its lasting effect on the hearts and minds of those that partake in its reading experience.

Table of Contents Shear Tension And Compression

- Understanding the eBook Shear Tension And Compression
 - The Rise of Digital Reading Shear Tension And Compression
 - Advantages of eBooks Over Traditional Books
- 2. Identifying Shear Tension And Compression
 - 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 Shear Tension And Compression
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from Shear Tension And Compression
 - Personalized Recommendations
 - Shear Tension And Compression User Reviews and Ratings
 - Shear Tension And Compression and Bestseller Lists
- 5. Accessing Shear Tension And Compression Free and Paid eBooks
 - Shear Tension And Compression Public Domain

- **eBooks**
- Shear Tension And Compression eBook Subscription Services
- Shear Tension And Compression Budget-Friendly Options
- 6. Navigating Shear Tension And Compression eBook Formats
 - o ePub, PDF, MOBI, and More
 - Shear Tension And Compression Compatibility with Devices
 - Shear Tension And Compression Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Shear Tension And Compression
 - Highlighting and Note-Taking Shear Tension And Compression
 - Interactive Elements Shear Tension And Compression
- 8. Staying Engaged with Shear Tension And Compression
 - $\circ \ Joining \ Online \ Reading \ Communities$
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Shear Tension And Compression
- 9. Balancing eBooks and Physical Books Shear Tension And Compression

- Benefits of a Digital Library
- Creating a Diverse Reading Collection Shear Tension And Compression
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Shear Tension And Compression
 - Setting Reading Goals Shear Tension And Compression
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Shear Tension And Compression
 - Fact-Checking eBook Content of Shear Tension And Compression
 - Distinguishing Credible Sources
- 13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
- 14. Embracing eBook Trends
 - \circ Integration of Multimedia Elements
 - Interactive and Gamified eBooks

Shear Tension And Compression Introduction

Shear Tension And Compression Offers over 60,000 free eBooks, including many classics that are in the public domain. Open Library: Provides access to over 1 million free eBooks, including classic literature and contemporary works.

Shear Tension And Compression Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. Shear Tension And Compression: This website hosts a vast collection of scientific articles, books, and textbooks. While it operates in a legal gray area due to copyright issues, its a popular resource for finding various publications. Internet Archive for Shear Tension And Compression: Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks Shear Tension And Compression Offers a diverse range of free eBooks across various genres. Shear Tension And Compression Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. Shear Tension And Compression Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific Shear Tension And Compression, especially related to Shear Tension And Compression, might be challenging as theyre often artistic creations rather than practical blueprints. However, you can explore the following steps to search for or create your own Online Searches: Look for websites, forums, or blogs dedicated to Shear Tension And Compression, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some Shear Tension And Compression books or magazines might include. Look for these in online stores or libraries. Remember that while Shear Tension And Compression, sharing copyrighted material without permission is not legal. Always ensure

youre either creating your own or obtaining them from legitimate sources that allow sharing and downloading. Library Check if your local library offers eBook lending services. Many libraries have digital catalogs where you can borrow Shear Tension And Compression eBooks for free, including popular titles. Online Retailers: Websites like Amazon, Google Books, or Apple Books often sell eBooks. Sometimes, authors or publishers offer promotions or free periods for certain books. Authors Website Occasionally, authors provide excerpts or short stories for free on their websites. While this might not be the Shear Tension And Compression full book , it can give you a taste of the authors writing style. Subscription Services Platforms like Kindle Unlimited or Scribd offer subscription-based access to a wide range of Shear Tension And Compression eBooks, including some popular titles.

FAQs About Shear Tension And Compression Books

What is a Shear Tension And Compression PDF? A PDF (Portable Document Format) is a file format developed by Adobe that preserves the layout and formatting of a document, regardless of the software, hardware, or operating system used to view or print it. How do I create a Shear Tension And Compression PDF? There are several ways to create a PDF: Use software like Adobe Acrobat, Microsoft Word, or Google Docs, which often have built-in PDF creation tools. Print to PDF: Many applications and

operating systems have a "Print to PDF" option that allows you to save a document as a PDF file instead of printing it on paper. Online converters: There are various online tools that can convert different file types to PDF. How do I edit a Shear Tension And Compression PDF? Editing a PDF can be done with software like Adobe Acrobat, which allows direct editing of text, images, and other elements within the PDF. Some free tools, like PDFescape or Smallpdf, also offer basic editing capabilities. How do I convert a Shear **Tension And Compression PDF to another file format?** There are multiple ways to convert a PDF to another format: Use online converters like Smallpdf, Zamzar, or Adobe Acrobats export feature to convert PDFs to formats like Word, Excel, IPEG, etc. Software like Adobe Acrobat, Microsoft Word, or other PDF editors may have options to export or save PDFs in different formats. How do I password-protect a Shear Tension And Compression PDF? Most PDF editing software allows you to add password protection. In Adobe Acrobat, for instance, you can go to "File" -> "Properties" -> "Security" to set a password to restrict access or editing capabilities. Are there any free alternatives to Adobe Acrobat for working with PDFs? Yes, there are many free alternatives for working with PDFs, such as: LibreOffice: Offers PDF editing features. PDFsam: Allows splitting, merging, and editing PDFs. Foxit Reader: Provides basic PDF viewing and editing capabilities. How do I compress a PDF file? You can use online tools like Smallpdf, ILovePDF, or desktop software like Adobe Acrobat to compress PDF files without significant quality loss. Compression reduces the file size, making it easier to share

and download. Can I fill out forms in a PDF file? Yes, most PDF viewers/editors like Adobe Acrobat, Preview (on Mac), or various online tools allow you to fill out forms in PDF files by selecting text fields and entering information. Are there any restrictions when working with PDFs? Some PDFs might have restrictions set by their creator, such as password protection, editing restrictions, or print restrictions. Breaking these restrictions might require specific software or tools, which may or may not be legal depending on the circumstances and local laws.

Find Shear Tension And Compression

frigidaire affinity dryer manual

human resource management case studies with solution

acs study guide lucy t eubanks

grewal levy marketing 4e instructors manual bestech manual btv110d

cosworth wrc parts group a parts rs cosworth breakers

nccer ironworker test

panorama 4th edition answer key

essential grammar in use with answers a

calculus larson 10th edition

metallurgy fundamentals

stephen sondheim life meryle secrest

comprehension test for george washington socks

tgb blade 250 atv service manual

muzik shqip 2017 shkarko muzik shqip 2017 mp3 shqip

Shear Tension And Compression:

<u>private down under by james patterson michael</u> - May 15 2023

aug 26 2014 audio cd 21 94 1 used from 23 93 8 new from 21 94 the world's most exclusive detective agency opens a new office in australia with the best detectives in the **private down under kindle edition amazon com** - Aug 18

private down under kindle edition amazon com - Aug 18 2023

mar 31 2015 with the best detectives in the business cutting edge technology and offices around the globe there is no investigation company quite like private now at a glittering

private down under wikipedia - Sep 19 2023

english 490 pages large print with the best detectives in the business cutting edge technology and offices around the globe there is no investigation agency quite like private now at a

hamas seeds violent videos on sites with little moderation - Nov 28 2021

oct 16 2023 through q2 2023 the state territorial and tribal recipients of haf have expended over 5 5 billion to assist homeowners a 32 increase from q1 2023 in addition through the

private down under private 6 kindle edition - Dec 10 2022

private down under james patterson michael white tim

wright actor hachette audio firm with the best detectives in the business cutting edge technology and offices around private down under or private oz patterson james 1947 - Jul 05 2022

jan 30 2014 private down under private 6 paperback 30 january 2014 by james patterson author michael white author 4 0 4 0 out of 5 stars 11 830 ratings

private down under by james patterson hachette book group - Aug~06~2022

3 74 297 ratings23 reviews want to read kindle unlimited 0 00 rate this book private down by james patterson michael white summary analysis by book sense this is a summary quora a place to share knowledge and better understand the - Jul 25 2021

may 23 2023 with the best detectives in the business cutting edge technology and offices around the globe there is no investigation company quite like private now at a glittering

private down under private 6 paperback 30 jan - Jan 11 2023

bir james patterson eseri olan private down under private 6 en cazip fiyat ile d r de keşfetmek için hemen tıklayınız **white house announces new actions on homeownership** - Aug 26 2021

oct 16 2023 real estate brokers pocketing up to 6 in fees draw antitrust scrutiny doj weighs case as class action trial starts in missouri typical 5 6 commission split by two **private down under paperback august 26 2014 amazon com** - Mar 13 2023

may 23 2013 private is going down under and it might be

going down for good p i craig gisto head of the latest branch of private is enjoying the glamorous launch party with his **us marine rapid response force moving toward israel as** - Dec 30 2021

mar 17 2016 service down special deal 12 months 24 month extra all privatevpn plans are protected by a 100 money back guarantee simply sign up in 3 easy steps and test out

private down under mass market paperback 31 march 2015 - Jun $04\ 2022$

private down under private 6 patterson james white michael amazon com tr kitap

private down under by james patterson michael white - May 03 2022

oct 9 202303 57 in 2005 under international and domestic pressure israel withdrew around 9 000 israeli settlers and its military forces from gaza leaving the enclave to be governed by

private down under amazon com - Jun 16 2023

private down under is the seventh book of patterson s private series this novel was written by patterson and michael white and was first published in 2012 by random house australia us real estate brokers commission system faces doj - May 23 2021

politics latest mortgage holders 580 a month worse off under - Oct 28 2021

we would like to show you a description here but the site won t allow us

private down under patterson james 1947 free - Jul 17 2023

private down under ebook written by james patterson michael white read this book using google play books app on your pc android ios devices download for offline reading **private down under private 6 james patterson fiyat** - Oct 08 2022

english 360 pages 24 cm p i craig gisto head of the latest branch of private is enjoying the glamorous launch party with his new team when their celebrations are interrupted by the

gaza strip explained who controls it and what to know nbc - Jan 31 2022

oct 20 2023 earlier today prime minister rishi sunak met with the emir of qatar as part of his jam packed two day trip to the middle east he is expected to arrive in egypt shortly where his

private down under patterson james 1947 author archive org - Nov 09 2022

description the world's most exclusive detective agency opens a new office in australia with the best detectives in the business cutting edge technology and offices around the globe

private down under audiobook on cd 2016 worldcat org

- Sep 07 2022

private down under mass market paperback 31 march 2015 by james patterson author dr michael white author 4 0 out of 5 stars 11 644 ratings

private down under wikiwand - Apr 14 2023

private is going down under and it might be going down for good p i craig gisto head of the latest branch of private is enjoying the glamorous launch party with his new team **private down under private 6 amazon com au** - Apr 02 2022

oct 17 2023 a us marine rapid response force is headed to the waters off the coast of israel and the pentagon is preparing american troops for a potential deployment to the country

private down under private 6 amazon com tr - Mar 01 2022

oct $10\ 2023$ a video of a hamas gunman firing his assault rifle at a car full of israeli civilians was viewed more than one million times on x the platform formerly known as twitter since it

service down privatevpn - Sep 26 2021

17 hours ago el paso texas kvia el paso police sent out an alert thursday evening warning the public of a serious crash along loop 375 west at us 54 emergency crews shut private down under penguin books uk - Feb 12 2023 315 pages large print 23 cm

police shut down loop 375 west at us 54 following crash \mathbf{kvia} - Jun 23 2021

irresistible integrals symbolics analysis and experiments in the - Sep 05 2022

web irresistible integrals symbolics analysis and experiments in the evaluation of integrals george boros and victor h moll publisher cambridge university press publication date 2004 number of pages 320 format paperback price 29 99 isbn 0 521 79636 9 category monograph maa review table of contents reviewed by

irresistible integrals symbolics analysis and experiments in the - Jun 02 2022

web jun 21 2004 irresistible integrals symbolics analysis and experiments in the evaluation of integrals paperback illustrated june 21 2004 by george boros author victor moll author 15 ratings see all formats and editions kindle edition 64 91 read with our free app printed access code 64 95 1 new from 64 95 paperback

irresistible integrals symbolics analysis and experiments in the - Dec 08 2022

web jun 21 2004 it was an especially important subject in nineteenth century analysis and it has now been revived with the appearance of symbolic languages the authors use the problem of exact evaluation of

irresistible integrals symbolics analysis and experiments in the - Oct 06 2022

web jun 1 2004 irresistible integrals symbolics analysis and experiments in the evaluation of integrals george boros victor h moll 4 13 8 ratings0 reviews the problem of evaluating integrals is well known to every student who has had a year of calculus

irresistible integrals symbolics analysis and experiments in the - $\mathrm{Jul}\ 03\ 2022$

web irresistible integrals symbolics analysis and experiments in the evaluation of integrals available in hardcover paperback

pdf irresistible integrals symbolics analysis and experiments - $\mbox{\sc Apr}\ 12\ 2023$

web jun 1 2006 irresistible integrals symbolics analysis and experiments in the evaluation of integrals authors george boros victor moll tulane university j j foncannon 1 introduction 2 factorials

irresistible integrals cambridge university press - Jul 15 2023 web symbolics analysis and experiments in the evaluation of integrals george boros formerly of xavier university of lousiana victor moll tulane university cambridge university press 978 0 521 79636 1 irresistible integrals symbolics analysis and experiments in the evaluation of integrals george boros and victor moll frontmatter

irresistible integrals symbolics analysis and experiments in the - Aug 16 2023

web 1 online resource xiv 306 pages the problem of evaluating integrals is well known to every student who has had a year of calculus it was an especially important subject in 19th century analysis and it has now been revived with the appearance of symbolic languages

irresistible integrals cambridge university press assessment - Jan 09 2023

web products and services our innovative products and services for learners authors and customers are based on world class research and are relevant exciting and inspiring irresistible integrals symbolics analysis and experiments in the - Mar 31 2022

web irresistible integrals symbolics analysis and experiments in the evaluation of integrals boros george amazon com au books

irresistible integrals cambridge university press - May 13 2023

web irresistible integrals symbolics analysis and experiments in the evaluation of integrals george boros formerly of xavier university of lousiana victor moll tulane university iii published by the press syndicate of the university of cambridge the pitt building trumpington street cambridge united kingdom

irresistible integrals symbolics analysis and experiments in the - May 01 2022

web irresistible integrals symbolics analysis and experiments in the evaluation of integrals paperback 4 7 16 ratings see all formats and editions paperback print length 322 pages print length 322 pages language english dimensions 15 24 x 2 06 x 22 86 cm isbn 10 0521796369 isbn 13 978 0521796361 see all details product details

irresistible integrals symbolics analysis and experiments in the - Mar 11 2023

web jun 21 2004 irresistible integrals symbolics analysis and experiments in the evaluation of integrals illustrated edition irresistible integrals symbolics analysis and experiments in the evaluation of integrals illustrated edition by george boros author victor moll author 21 ratings see all formats and editions

pdf irresistible integrals symbolics analysis and experiments - Feb 27 2022

web download free pdf irresistible integrals symbolics analysis and experiments in the evaluation of integrals victor h moll 2006 the mathematical intelligencer the problem of evaluating integrals is well known to every student who has had a year of calculus

descargar pdf irresistible integrals paperback

symbolics analysis - Dec 28 2021

web jun 28 2021 name irresistible integrals paperback symbolics analysis and experiments in the evaluation of integrals autor george boros categoria libros ciencias tecnología y medicina matemáticas tamaño del archivo 12 mb tipos de archivo pdf document idioma español archivos de estado available

<u>irresistible integrals symbolics analysis and experiments</u> - Feb 10 2023

web symbolics analysis and experiments in the evaluation of integrals authors george boros xavier university of louisiana victor moll tulane university louisiana date published june 2004 availability available format hardback isbn 9780521791861 rate review 151 00 c hardback add to cart add to wishlist other available formats irresistible integrals symbolics analysis and experiments in the - Jan 29 2022

web nov 13 2008 irresistible integrals symbolics analysis and experiments in the evaluation of integrals j j foncannon the mathematical intelligencer 28 65 68 2006 cite this article 342 accesses 9 citations metrics download to read the full article text author information authors and affiliations philadelphia pennsylvania usa j j

irresistible integrals abebooks - Aug 04 2022 web irresistible integrals symbolics analysis and experiments in the evaluation of integrals paperback by boros george and a great selection of related books art and collectibles available now at abebooks co uk irresistible integrals abebooks skip to main content abebooks co uk search sign onmy accountbasket help menu search

irresistible integrals symbolics analysis and experiments in the - Nov 07 2022

web buy irresistible integrals symbolics analysis and experiments in the evaluation of integrals illustrated by boros george isbn 9780521796361 from amazon s book store everyday low prices and free delivery on eligible orders irresistible integrals cambridge university press assessment - Jun 14 2023

web it was an especially important subject in 19th century analysis and it has now been revived with the appearance of symbolic languages in this book the authors use the problem of exact evaluation of definite integrals as a starting point for pdf class struggle and revolutionary pressures in nigeria - Apr 04 2022

web nov 1 2014 the struggle between classes is all part of the yearning of the dominated class for freedom equa lity and justice in the process of production and distrib ution of classes and class struggle in kenya pdf - Jul 19 2023 web class struggle and resistance in africa apr 11 2023 this collection of essays and interviews studies class struggle and social empowerment on the african continent classes and class struggle in kenya amazon com - Nov 11 2022

web nov 6 2009 an understanding of class forces in kenya will lead to the conclusion that kenya is a neocolonial capitalist state with its base in imperialism further it will tell

the classes class struggle in kenya the origin and meaning - Aug 20 2023

web the classes class struggle in kenya the origin and meaning of the name the ukombozi library information as a

tool of liberation shiraz durrani kenya was a victim class struggle in kenya and search for uhuru nation - May 17 2023

web apr 1 2023 the thrust of the anti colonial struggles in kenya was the economic and political liberation of kenyans kenyans especially africans wanted to be free of racism read download classes and class struggle in kenya pdf - Sep 09 2022

web the kenyan bourgeois class includes africans europeans and asia and consists of four main strata 1 the imperialist bourgeoisie 2 the comprador bourgeoisie 3 the nationalist top ranked mba programs struggle to reverse declining - Mar 03 2022

web nov 6 2023 several programs including the university of michigan s ross school of business have pursued an official stem designation that allows foreign students to classes and class struggle in kenya amazon singapore - Dec 12 2022

web hello sign in account lists returns orders cart buy classes and class struggle in kenya book online at low - May 05 2022

web amazon in buy classes and class struggle in kenya book online at best prices in india on amazon in read classes and class struggle in kenya book reviews author

classes and class struggle in kenya paperback 6 nov **2009** - Feb 02 2022

web buy classes and class struggle in kenya by kinyatti maina wa isbn 9781439263051 from amazon s book store everyday low prices and free delivery on eligible orders classes and class struggle in kenya goodreads - Mar 15 2023

web read reviews from the world's largest community for readers class struggle in kenya to understand social class in a society we should begin by making a sc classes and class struggle in kenya booksrun com - Aug 08 2022

web acknowledged authors kinyatti maina wa wrote classes and class struggle in kenya comprising 38 pages back in 2009 textbook and etextbook are published under isbn

issue 1 classes and class struggle in kenya kenyasocialist - Sep 21 2023

web sep $24\ 2019$ issue 1 classes and class struggle in kenya issue 2 women s oppression and liberation issue 3 repression and resistance issue 4 elections under

web with class struggle that the term over developed is unhelpful since the east african states at independence took relatively small 16 25 percentages of g d p and that the class ebook classes and class struggle in kenya - Oct 30 2021 web classes and class struggle in kenya communication and class struggle liberation socialism jan 06 2023 teachers and classes apr 04 2020 in this study first

classes and class struggle in kenya kenyasocialist - Oct 22 2023

web the emergence of class division is related to the advancement of productive forces and consequently the emergence of private property the ruling class tends to show that

classes and class struggle in kenya copy - Nov 30 2021

web classes and class struggle in kenya the struggle jul 01 2021 sequel to the designated ones trying to strengthen her faith the stranger challenges priscilla to lean

classes and class struggle in kenya paperback nov 6 **2009** - Jan 01 2022

web classes and class struggle in kenya kinyatti maina wa 9781439263051 books amazon ca

the class struggle in africa jstor - Oct 10 2022

web the class struggle in africa significant it is not necessary however to be burdened by a static concept of class such as the class categories relevant to western

 ${\color{blue} \underline{classes and classstruggleinkenya~pdf~atlassian~eng~sangoma-} \\ \underline{Jul~07~2022}$

web history of resistance in kenya 1884 2002 class struggle and the problem in eritrea land food freedom class struggle in africa a history of africa the continuing class download free classes and class struggle in kenya - Feb 14 2023

web class struggle nov 11 2022 available for the first time in english this book examines and reinterprets class struggle within marx and engels thought as losurdo argues class classes and class struggle in kenya pdf - Jun 18 2023 web classes class contradictions and class struggles in kenya both historical and current expose the damage done by capitalism and imperialism in kenya and africa offer classes and class struggle in kenya book pdf download - Jun 06 2022

web nov 6 2009 download the fantastic book titled classes and class struggle in kenya written by maina wa kinyatti available in its entirety in both pdf and epub formats for

 $\begin{array}{c} \underline{\text{editorial class struggle in kenya kenyasocialist}} \text{ - Apr 16 2023} \\ \text{web aug 15 2023} \quad \text{class struggle in kenya and the search for} \\ \end{array}$

uhuru is the title of the first article in this issue of the kenya socialist it is a review of two paths ahead1 by tom