

TOPICAL
WORKED SOLUTIONS

O
LEVEL
EXAM
PAPERS

Mathematics



Level

Project Editor: Asim Shoh

O Level Mathematics Topical Past Papers

University of Virginia

The logo of the University of Virginia, featuring a red and white shield with a blue cross and a white crescent moon.

O Level Mathematics Topical Past Papers:

Unveiling the Power of Verbal Beauty: An Mental Sojourn through **O Level Mathematics Topical Past Papers**

In a global inundated with screens and the cacophony of instantaneous communication, the profound energy and psychological resonance of verbal artistry frequently fade into obscurity, eclipsed by the regular assault of sound and distractions. However, nestled within the musical pages of **O Level Mathematics Topical Past Papers**, a interesting function of literary splendor that pulses with organic emotions, lies an unique trip waiting to be embarked upon. Published by a virtuoso wordsmith, this exciting opus courses viewers on a psychological odyssey, delicately revealing the latent possible and profound affect embedded within the elaborate web of language. Within the heart-wrenching expanse with this evocative evaluation, we can embark upon an introspective exploration of the book is key subjects, dissect its interesting publishing type, and immerse ourselves in the indelible impact it leaves upon the depths of readers souls.

https://crm.avenza.com/About/publication/default.aspx/Report_On_Drug_Addiction.pdf

Table of Contents O Level Mathematics Topical Past Papers

1. Understanding the eBook O Level Mathematics Topical Past Papers
 - The Rise of Digital Reading O Level Mathematics Topical Past Papers
 - Advantages of eBooks Over Traditional Books
2. Identifying O Level Mathematics Topical Past Papers
 - 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 O Level Mathematics Topical Past Papers
 - User-Friendly Interface
4. Exploring eBook Recommendations from O Level Mathematics Topical Past Papers
 - Personalized Recommendations

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

- 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

O Level Mathematics Topical Past Papers Introduction

O Level Mathematics Topical Past Papers 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. O Level Mathematics Topical Past Papers Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. O Level Mathematics Topical Past Papers : 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 O Level Mathematics Topical Past Papers : Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks O Level Mathematics Topical Past Papers Offers a diverse range of free eBooks across various genres. O Level Mathematics Topical Past Papers Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. O Level Mathematics Topical Past Papers Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific O Level Mathematics Topical Past Papers, especially related to O Level Mathematics Topical Past Papers, 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 O Level Mathematics Topical Past Papers, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some O Level Mathematics Topical Past Papers books or magazines might include. Look for these in online stores or libraries. Remember that while O Level Mathematics Topical Past Papers, 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 O Level Mathematics Topical Past Papers 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 O Level Mathematics Topical Past Papers 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 O Level Mathematics Topical Past Papers eBooks, including some popular titles.

FAQs About O Level Mathematics Topical Past Papers Books

1. Where can I buy O Level Mathematics Topical Past Papers books? Bookstores: Physical bookstores like Barnes & Noble, Waterstones, and independent local stores. Online Retailers: Amazon, Book Depository, and various online bookstores offer a wide range of books in physical and digital formats.
2. What are the different book formats available? Hardcover: Sturdy and durable, usually more expensive. Paperback: Cheaper, lighter, and more portable than hardcovers. E-books: Digital books available for e-readers like Kindle or software like Apple Books, Kindle, and Google Play Books.
3. How do I choose a O Level Mathematics Topical Past Papers book to read? Genres: Consider the genre you enjoy (fiction, non-fiction, mystery, sci-fi, etc.). Recommendations: Ask friends, join book clubs, or explore online reviews and recommendations. Author: If you like a particular author, you might enjoy more of their work.
4. How do I take care of O Level Mathematics Topical Past Papers books? Storage: Keep them away from direct sunlight and in a dry environment. Handling: Avoid folding pages, use bookmarks, and handle them with clean hands. Cleaning: Gently dust the covers and pages occasionally.
5. Can I borrow books without buying them? Public Libraries: Local libraries offer a wide range of books for borrowing. Book Swaps: Community book exchanges or online platforms where people exchange books.
6. How can I track my reading progress or manage my book collection? Book Tracking Apps: Goodreads, LibraryThing, and Book Catalogue are popular apps for tracking your reading progress and managing book collections. Spreadsheets: You can create your own spreadsheet to track books read, ratings, and other details.
7. What are O Level Mathematics Topical Past Papers audiobooks, and where can I find them? Audiobooks: Audio recordings of books, perfect for listening while commuting or multitasking. Platforms: Audible, LibriVox, and Google Play Books offer a wide selection of audiobooks.
8. How do I support authors or the book industry? Buy Books: Purchase books from authors or independent bookstores. Reviews: Leave reviews on platforms like Goodreads or Amazon. Promotion: Share your favorite books on social media

or recommend them to friends.

9. Are there book clubs or reading communities I can join? Local Clubs: Check for local book clubs in libraries or community centers. Online Communities: Platforms like Goodreads have virtual book clubs and discussion groups.
10. Can I read O Level Mathematics Topical Past Papers books for free? Public Domain Books: Many classic books are available for free as they're in the public domain. Free E-books: Some websites offer free e-books legally, like Project Gutenberg or Open Library.

Find O Level Mathematics Topical Past Papers :

report on drug addiction

~~reset maintenance light scion xb 2012~~

reporting category 1 functional relationships

~~research paper outline template apa~~

~~residential electrical wiring diagram example~~

report on auto industry

research papers my dad

reset mytouch 3g slide

residential energy audit manual

reset maintenance light 2006 honda accord

research paper grading rubric high school

research vowel digraphs information

report child abuse in georgia

reporting services report url parameters

reproductive system hw packet answer key

O Level Mathematics Topical Past Papers :

the earth is trembling Édouard glissant in conversation - Jun 04 2022

dec 20 2021 Édouard glissant the earth is trembling systems of thought have been demolished and there are no more straight paths there are endless floods eruptions earthquakes fires today the world is unpredictable and in such a world utopia is necessary but utopia needs trembling thinking we cannot discuss utopia with fixed ideas

the afterwords of Édouard glissant francosphères - Sep 07 2022

jan 6 2022 in the years that have followed Édouard glissant's death in february 2011 his peers exegetes and spiritual heirs have striven to shape the reception of his work and to establish his place in various philosophical and literary traditions

glissant edouard postcolonial studies emory university - May 15 2023

nov 4 2015 glissant edouard edouard glissant was born in saint marie martinique in 1928 to a family of five children his father was working as an agricultural manager or gèreur d habitation 1 and directly exposed the young edward to the colonial reality

Édouard glissant author of poetics of relation goodreads - Feb 12 2023

feb 3 2011 poetry philosophy edit data Édouard glissant was a french writer poet philosopher and literary critic from martinique he is widely recognised as one of the most influential figures in caribbean thought and cultural commentary

Édouard glissant wikipedia - Mar 01 2022

Édouard glissant 21 september 1928 in beaudin martinique 3 february 2011 in paris war ein französischer schriftsteller dichter und philosoph er gilt als bedeutender autor der französischsprachigen karibik und als einer der intellektuellen vordenker zu fragen postkolonialer identität und kulturtheorie 1 inhaltsverzeichnis 1 biographie

poetics of relation monoskop - May 03 2022

discourses in glissant's work agents has resonance in every day language agents de presse etc but also carries overtones of political agency Éclat and éclater the verb is frequently repeated throughout glissant's poetry and prose Éclat in the case of agents d éclat has a somewhat pejorative sense it is the

Édouard glissant wikipedia - Sep 19 2023

Édouard glissant Édouard glissant 21 september 1928 3 february 2011 1 was a french writer poet philosopher and literary critic from martinique he is widely recognised as one of the most influential figures in caribbean thought and cultural commentary and francophone literature 1

edouard glissant books the guardian - Jun 16 2023

feb 13 2011 edouard glissant who has died aged 82 was one of the most important writers of the french caribbean his novels with their combination of textual complexity and emotional intensity first

Édouard glissant caribbean poetry novels britannica - Jul 17 2023

sep 17 2023 Édouard glissant french speaking west indian poet and novelist who belonged to the literary africanism movement glissant was a disciple and fellow countryman of the poet aimé césaire who founded the negritude movement to promote an african culture free of all colonial influences

library of glissant studies home - Jan 11 2023

welcome to the library of glissant studies logs this collaborative open access project aims to collect and make works by and on martinican author Édouard glissant 1928 2011 widely accessible

Édouard glissant philosopher heraclitus and hegel in the - Dec 10 2022

feb 3 2022 alexandre leupin s study of Édouard glissant as a philosopher offers an unusual and ambitious reading of glissant s work rather than conceiving him as a caribb

Édouard glissant wikipédia - Aug 18 2023

mathieu Édouard glissant né le 21 septembre 1928 à sainte marie en martinique et mort le 3 février 2011 à paris 15e est un romancier poète et philosophe français il obtient le prix renaudot en 1958 pour son roman la lézarde

glissant edouard global social theory - Oct 08 2022

edouard glissant 1928 2011 was a martinican poet novelist and theorist he is especially known for his poetics of relation an exploration of relational belonging as a decolonial poetic intervention

comprendre le tout monde d Édouard glissant radio france - Jan 31 2022

aug 29 2018 Édouard glissant est un penseur de la complexité son esthétique du tout monde met en relation la politique la philosophie et la poésie avec ce concept il questionne la créolisation globale du monde dynamique récente généralisée et accélérée en proie au phénomène de mondialisation

Édouard glissant 1928 2011 poète d un monde à venir radio - Aug 06 2022

dec 12 2020 patrick chamoiseau l œuvre d edouard glissant nous donne la clé du monde contemporain la 1ère 21 septembre 2015 sylvie séma glissant nos imaginaires traversants dans la revue l insatiable aubervilliers en archipels artistes habitants 2018 entretien avec juliette Éloi blézès à propos de son livre de la lézarde à ormerod

poetics of relation glissant Édouard 1928 2011 free - Jul 05 2022

in this book french caribbean writer and philosopher Édouard glissant turns the concrete particulars of caribbean reality into a complex vision of a world in transformation he sees the islands of the antilles as enduring as invalid suffering imposed by history yet also as a place whose unique interactions will one day produce an emerging

the right to opacity reading fred moten and Édouard glissant - Apr 14 2023

mar 21 2022 navigate the works of glissant and moten with moderate confidence establish an understanding of theorists artists and writers related to glissant and moten describe the political implications of glissant s right to opacity

Édouard glissant a poetics of resistance university of - Mar 13 2023

abstract description of output Édouard glissant was a leading voice in debates centering on the postcolonial condition and on the present and future of globalisation prolific as both a theorist and a literary author glissant started his career as a contemporary of frantz fanon in the early days of francophone postcolonial thought

the collected poems of Édouard glissant - Nov 09 2022

Édouard glissant 1928 2011 was one of the most influential postcolonial theorists novelists playwrights and poets not only in the caribbean but also in contemporary french letters he has twice been a finalist for the nobel prize in literature as well as the recipient of the prix renaudot and the prix charles veillon in france

edouard glissant biographie fondation pour la memoire de - Apr 02 2022

edouard glissant 1928 2011 est un écrivain et philosophe martiniquais sa jeunesse est marquée par un engagement militant pour la libération des colonies et d un intérêt pour le mouvement surréaliste en 1946 il s installe à paris afin de suivre des études de philosophie à la sorbonne et d ethnographie au musée de l homme

cnc vertical machining center millac 852v ii okuma - Apr 09 2023

web our millac 852v ii vertical machining center is the ultimate in large machining centers with high rigidity heavy cutting ability and high operability the strong base column construction has optimally placed ribs to counter chatter and twisting during heavy duty cutting

okuma america cnc machine tools cnc controls - Jun 30 2022

web okuma america corporation helps users gain competitive advantage through the open possibilities of our cnc machine tools and advanced technologies okuma americas the americas

vertical machining centers millac vll series okuma - Aug 13 2023

web machining capacity millac 468v II 360cm³ min no 50 6 000min 1 18 5kw integral motor spindle millac 561v II 588cm³ min no 50 10 000min 1 22kw integral motor spindle millac 761v II millac 852v II 540cm³ min no 50 4 000min 1 18 5kw 2 speed gear head spindle millac 1052v II 756cm³ min

cnc vertical machining center millac 561v ii okuma - Mar 08 2023

web product detail our millac 561v ii vertical machining center is the ultimate in large machining centers with high rigidity heavy cutting ability and high operability the strong base column construction has optimally placed ribs to counter chatter and twisting during heavy duty cutting

okuma howa millac manual book - Apr 28 2022

web okuma howa millac manual inelastic analysis of solids and structures mar 12 2021 inelastic analysis of solids and structures presents in a unified manner the physical and theoretical background of inelastic material models and computational methods and illustrates the behavior of the models in typical engineering conditions

okuma howa millac manual wrbb neu edu - Feb 24 2022

web okuma howa millac manual is reachable in our digital library an online access to it is set as public in view of that you can download it instantly our digital library saves in multiple countries allowing you to get the most less latency time to

vertical machining centers okuma - Sep 14 2023

web osp specifications millac 468v millac 561v millac 611v millac 761v millac 852v millac 1052v fanuc specifications integral motor spindle integral motor spindle gear no 50 4 000 min 1 18 5 kw 2 speed gear head spindle millac 761v millac 852v diverse lineup to meet all kinds of needs

cnc machining okuma howa 511v manual practical machinist - Nov 04 2022

web aug 28 2022 shot in the dark looking to see if anyone has a pdf manual for an o h millac 511v i got a few supplemental hard copy manuals with the machine appears that i m missing the main owners manual i know my way around these machines pretty well but have a al77 mgn position the chain atc magazine doesn t have a clue where it is

need help okuma howa millac 3va manual cnczone com - Jul 12 2023

web feb 6 2021 1 downloads 0 uploads 0 okuma howa millac 3va manual hi all i am looking for a manual for a okuma howa millac 3va milling machine 1986 that we have in the workshop we bought the workshop 2years back and have not been able to find any documentation regarding the machine since

horizontal machining center millac h11 series okuma corporation - Feb 07 2023

web world headquarters oguchi plant oguchi cho niwa gun aichi prefecture 480 0193 japan tel 81 587 95 7825 fax 81 587 95 6074

okuma archives machines service and support from hartwig - Aug 01 2022

web okuma america corporation is the u s based sales and service affiliate of okuma corporation a world leader in cnc machine tools founded in 1898 in nagoya japan view on okuma s site millac 44v ii millac 561v ii view on okuma s site millac 561v ii millac 761v ii view on okuma s site millac 761v ii mf v series learn

okuma manuals user guides cnc manual - Oct 15 2023

web we have 145 okuma manuals for free pdf download okuma manuals cnc programming operating maintenance manuals okuma e series okuma maintenance okuma operating okuma osp 5000 okuma osp 5020 okuma osp 7000 okuma osp e100 okuma osp p200 okuma osp p300 okuma osp u100 okuma parts book

stuck okuma howa millac 4va fanuc11m help please practical machinist - May 30 2022

web may 16 2020 i have a okuma howa 4va with a fanuc 15m the problem was a bad ram chip i have pdf s for an electrical schematic for a millac 4va but it uses fanuc 15m control and an operations manual for a millac 5va with a fanuc 6m maybe you can glean some useful info from them

okuma okuma howa millac 3va manual industryarena - Dec 05 2022

web feb 6 2021 okuma howa millac 3va manual hi all i am looking for a manual for a okuma howa millac 3va milling machine 1986 that we have in the workshop we bought the workshop 2years back and have not been able to find any

documentation regarding the machine since

okuma bought a millac 4va have questions practical - Oct 03 2022

web jun 19 2016 bought an okuma howa millac 4va on ebay wasn't seriously expecting to win the auction for what i bid but now i'm working on getting it from just outside chicago to my place near denver

okuma howa millac manual pdf thearcug - Mar 28 2022

web nov 11 2023 okuma howa millac manual pdf august 2022 surplus record machinery equipment directory may 2022 surplus record machinery equipment directory june 2022 surplus record machinery equipment directory

knowledge for your shop okuma machinists handbook - Jan 06 2023

web a guide to identifying and solving shop inefficiencies to be the most profitable and competitive in the marketplace your machine shop's process has to be as efficient as possible discover our step by step guide to identifying your shop's inefficiencies and how to address them to improve productivity learn more blog post

where's my machine manual okuma - May 10 2023

web may 1 2019 operation maintenance manual this manual provides general care for the machine from changing the fluids to which parts should be replaced for preventive maintenance chris heeg is board repair supervisor okuma america corporation okuma supplies machine manuals in a variety of formats

vertical machining center millac 44v II okuma - Jun 11 2023

web the slideway on each axis is a highly rigid box way enabling high vibration absorbance high quality machining the superb maintainability of the 44v II also provides long term product assurance for the customer

hmc okuma pdf catalogs technical documentation - Sep 02 2022

web all okuma catalogs and technical brochures lu s series 1 pages vtm series 1 pages millac 44v ii 1 pages millac h series 1 pages

dental visualization a practical approach to digi pdf - Sep 06 2023

web dental visualization a practical approach to digi 1 dental visualization a practical approach to digi advances in craniofacial and dental materials through

dental visualization a practical approach to digi - Mar 20 2022

web dental visualization a practical approach to digi ai in clinical medicine diagnosis and management of dental caries dental radiology essentials of dental photography

digital dentistry wikipedia - Jan 30 2023

web digital dentistry refers to the use of dental technologies or devices that incorporates digital or computer controlled components to carry out dental procedures rather than using

dental visualization a practical approach to digi pdf - Nov 27 2022

web jul 20 2023 dental visualization a practical approach to digi 2 14 downloaded from uniport edu ng on july 20 2023 by guest urban plazas and handheld devices screens

dental visualization a practical approach to digital photography - Jul 04 2023

web 3d digital scanners a high tech approach to more dental visualization a practical approach to digital practical considerations for digital dentistry decisions digital

dental visualization a practical approach to digi pdf - Feb 16 2022

web dental visualization a practical approach to digi 1 dental visualization a practical approach to digi a practical approach to saliva control a practical approach to

dental visualization a practical approach to digi pdf stephen - Aug 25 2022

web digitization in dentistry priyanka jain 2021 03 22 this book provides evidence based guidance on the clinical applications of digital dentistry that is the use of dental

dentalvisualizationapracticalapproachtodigi wikimid2 aapg - May 22 2022

web approach to internal medicine manual of forensic odontology fifth edition common ground at the nexus of information literacy and scholarly communication orthodontics

dental visualization a practical approach to digital photography - Oct 07 2023

web aug 6 2018 this book provides the practicing clinician with a clear and concise guide to dental photography and its role in modern dentistry the main aspects are broken down

dental visualization a practical approach to digi - Jul 24 2022

web dental visualization a practical approach to digi network security jan 31 2023 network security is a comprehensive resource written for anyone who plans or

dental visualization a practical approach to digi download only - Jun 03 2023

web you could buy lead dental visualization a practical approach to digi or get it as soon as feasible you could speedily download this dental visualization a practical approach

digitalization in dentistry cad cam a review dds pier - Jan 18 2022

web ment tooth and using a numerically controlled milling machine in 1971 4 5 he produced the first cad cam dental restoration in 1983 4 dr andersson developed the procera

dental visualization a practical approach to digi - Sep 25 2022

web dental visualization a practical approach to digi this is likewise one of the factors by obtaining the soft documents of this dental visualization a practical approach to digi

dentalvisualization a practicalapproach to digi - Oct 27 2022

web practical guide to using today s technology this unique text helps your students provide state of the art care over 1 500 high quality dental radiographs full color photos and

dental visualization a practical approach to digi book - Apr 01 2023

web dental visualization a practical approach to digi responsive and sustainable educational futures jan 27 2022 this book constitutes the proceedings of the 18th

dental visualization a practical approach to digi pdf - Jun 22 2022

web 2 dental visualization a practical approach to digi 2020 11 28 dental visualization a practical approach to digi downloaded from autoconfig sureoak com by guest

dental visualization a practical approach to digi copy - May 02 2023

web dental visualization a practical approach to digi embracing the track of phrase an emotional symphony within dental visualization a practical approach to digi in

digitalization in dentistry ethical challenges and implications - Feb 28 2023

web the fact that digital dentistry necessarily entails risks and ethical challenges by contrast is rarely discussed this paper aims to complement the discourse on digitalization in

dental visualization a practical approach to digi download only - Apr 20 2022

web dental visualization a practical approach to digi 1 dental visualization a practical approach to digi eventually you will unquestionably discover a other experience and

dental visualization a practical approach to digi - Nov 15 2021

web getting the books dental visualization a practical approach to digi now is not type of challenging means you could not single handedly going taking into consideration books

dentalvisualization a practical approach to digi dev sfcg - Dec 29 2022

web written specifically for dentists white and pharoah s oral radiology principles and interpretation 8th edition incorporates over 1 500 high quality radiographic images and

dental visualization a practical approach to digital photography - Dec 17 2021

web dentalbookshop 3 effective visualization techniques to change your life dental visualization a practical approach to digital dental visualization quintpub feraru

dental visualization a practical approach to digital photography - Aug 05 2023

web isbn 978 1 78698 004 5 author s editor s feraru mirela bichacho nitzan 248 pp 556 illus 2018