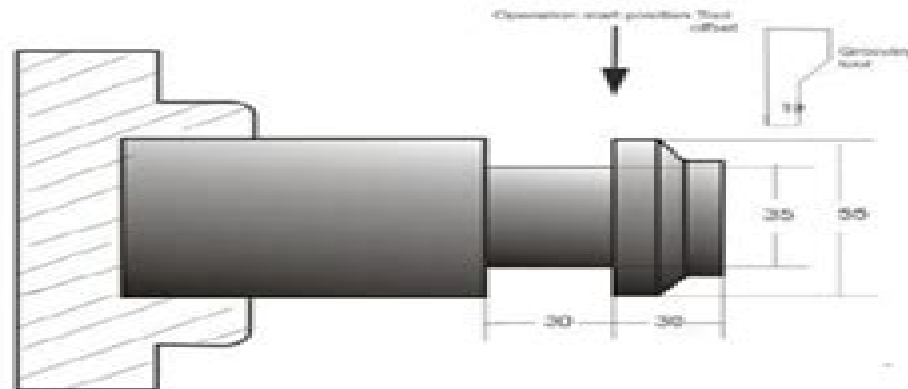


G75 FANUC CANNED CYCLE GROOVING CNC PROGRAM ..EXAMPLE

July 19, 2018 - [FANUC G75 GROOVING CYCLE \[T\]](#)



04521

```
N10 G90 G21 G99 F0.15 ;  
N20 G50 S1500 ;  
N30 M06 T01 01 ;  
N40 M03 G96 S300 ;  
N50 M08 ;  
N60 G00 X57 Z-40 ;  
N70 G75 R1 ;  
N80 G75 X35 Z-60 P3000 Q9000 ;  
N90 G00 X60 ;  
N100 G28 U0 W0 ;  
N110 M05 M30 ;
```

[More examples](#).....!!!!

Canned Grooving Cycle For Fanuc

Tran A_



Canned Grooving Cycle For Fanuc:

Recognizing the quirk ways to acquire this books **Canned Grooving Cycle For Fanuc** is additionally useful. You have remained in right site to begin getting this info. acquire the Canned Grooving Cycle For Fanuc colleague that we manage to pay for here and check out the link.

You could purchase lead Canned Grooving Cycle For Fanuc or get it as soon as feasible. You could speedily download this Canned Grooving Cycle For Fanuc after getting deal. So, subsequently you require the books swiftly, you can straight acquire it. Its so unconditionally simple and hence fats, isnt it? You have to favor to in this heavens

http://antonioscollegestation.com/files/detail/default.aspx/Chrysler_Full_Size_Front_Wheel_Drive_Automotive_Repair_Manual_Haynes_Repair_Manuals.pdf

Table of Contents Canned Grooving Cycle For Fanuc

1. Understanding the eBook Canned Grooving Cycle For Fanuc
 - The Rise of Digital Reading Canned Grooving Cycle For Fanuc
 - Advantages of eBooks Over Traditional Books
2. Identifying Canned Grooving Cycle For Fanuc
 - 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 Canned Grooving Cycle For Fanuc
 - User-Friendly Interface
4. Exploring eBook Recommendations from Canned Grooving Cycle For Fanuc
 - Personalized Recommendations
 - Canned Grooving Cycle For Fanuc User Reviews and Ratings
 - Canned Grooving Cycle For Fanuc and Bestseller Lists

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

Canned Grooving Cycle For Fanuc Introduction

Free PDF Books and Manuals for Download: Unlocking Knowledge at Your Fingertips In today's fast-paced digital age, obtaining valuable knowledge has become easier than ever. Thanks to the internet, a vast array of books and manuals are now available for free download in PDF format. Whether you are a student, professional, or simply an avid reader, this treasure trove of downloadable resources offers a wealth of information, conveniently accessible anytime, anywhere. The advent of online libraries and platforms dedicated to sharing knowledge has revolutionized the way we consume information. No longer confined to physical libraries or bookstores, readers can now access an extensive collection of digital books and manuals with just a few clicks. These resources, available in PDF, Microsoft Word, and PowerPoint formats, cater to a wide range of interests, including literature, technology, science, history, and much more. One notable platform where you can explore and download free Canned Grooving Cycle For Fanuc PDF books and manuals is the internet's largest free library. Hosted online, this catalog compiles a vast assortment of documents, making it a veritable goldmine of knowledge. With its easy-to-use website interface and customizable PDF generator, this platform offers a user-friendly experience, allowing individuals to effortlessly navigate and access the information they seek. The availability of free PDF books and manuals on this platform demonstrates its commitment to democratizing education and empowering individuals with the tools needed to succeed in their chosen fields. It allows anyone, regardless of their background or financial limitations, to expand their horizons and gain insights from experts in various disciplines. One of the most significant advantages of downloading PDF books and manuals lies in their portability. Unlike physical copies, digital books can be stored and carried on a single device, such as a tablet or smartphone, saving valuable space and weight. This convenience makes it possible for readers to have their entire library at their fingertips, whether they are commuting, traveling, or simply enjoying a lazy afternoon at home. Additionally, digital files are easily searchable, enabling readers to locate specific information within seconds. With a few keystrokes, users can search for keywords, topics, or phrases, making research and finding relevant information a breeze. This efficiency saves time and effort, streamlining the learning process and allowing individuals to focus on extracting the information they need. Furthermore, the availability of free PDF books and manuals fosters a culture of continuous learning. By removing financial barriers, more people can access educational resources and pursue lifelong learning, contributing to

personal growth and professional development. This democratization of knowledge promotes intellectual curiosity and empowers individuals to become lifelong learners, promoting progress and innovation in various fields. It is worth noting that while accessing free Canned Grooving Cycle For Fanuc PDF books and manuals is convenient and cost-effective, it is vital to respect copyright laws and intellectual property rights. Platforms offering free downloads often operate within legal boundaries, ensuring that the materials they provide are either in the public domain or authorized for distribution. By adhering to copyright laws, users can enjoy the benefits of free access to knowledge while supporting the authors and publishers who make these resources available. In conclusion, the availability of Canned Grooving Cycle For Fanuc free PDF books and manuals for download has revolutionized the way we access and consume knowledge. With just a few clicks, individuals can explore a vast collection of resources across different disciplines, all free of charge. This accessibility empowers individuals to become lifelong learners, contributing to personal growth, professional development, and the advancement of society as a whole. So why not unlock a world of knowledge today? Start exploring the vast sea of free PDF books and manuals waiting to be discovered right at your fingertips.

FAQs About Canned Grooving Cycle For Fanuc 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. Canned Grooving Cycle For Fanuc is one of the best book in our library for free trial. We provide copy of Canned Grooving Cycle For Fanuc in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Canned Grooving Cycle For Fanuc. Where to download Canned Grooving Cycle For Fanuc online for free? Are you looking for Canned Grooving Cycle For Fanuc PDF? This is definitely going to save you time and cash in something you should think about.

Find Canned Grooving Cycle For Fanuc :

chrysler full size front wheel drive automotive repair manual haynes repair manuals

chronic liver failure chronic liver failure

chrysler crossfire service manual

chrysler stratus owners manual mexico

chrysler pt cruiser 2002 repair service manual

chs course guide camas high school

church carnival planning guide

chrysalids study guide

chrysler 1974 3 5 140 hp service repair manual

chusmopolis madrid infernal e inexpugnable

church boyz temptations of the flesh volume 1

chrysler 2009 ves user guide

chronologische geschichte grossen elbfluten tausend

church history an essential guide abingdon essential guides

chrysler 300 manual transmission

Canned Grooving Cycle For Fanuc :

solution manual partial differential equations for scientists and - Nov 06 2022

web abebooks com solution manual for partial differential equations for scientists and engineers dover books on mathematics

9780486842523 by farlow stanley j and a

partial differential equations soluton stanley farlow pdf - Jul 14 2023

web partial differential equations by i g petrovsky interscience publishers 1957 contains a nice section on potential theory

describing the single and double layer potentials 2

solution manual for partial differential equations for scientists - Dec 27 2021

web in mathematics a partial differential equation pde is an equation which computes a function between various partial

derivatives of a multivariable function the function is

partial differential equations university of toronto department - Jan 08 2023

web jul 15 2020 solution manual partial differential equations for scientists and engineers provides detailed solutions for

problems in the textbook partial differential equations

partial differential equations for scientists and engineers - Oct 05 2022

web jul 15 2020 written for advanced undergraduates in mathematics as well as professionals working in the applied sciences the widely used and extremely successful text shows

solution manual for partial differential equations for abebooks - Aug 03 2022

web sep 15 2023 the numerical solution of partial differential equations pdes is a crucial component of scientific computing the idea of using a neural network to approximate

mathematics iii partial differential equations autumn 2021 eth z - Dec 07 2022

web jul 1 1985 stanley j farlow stephen f becker partial differential equations for scientists and engineers american journal of physics volume 53 issue 7 1 july 1985

partial differential equation wikipedia - Sep 23 2021

solution manual partial differential equations for scientists and - Jan 28 2022

web jul 1 1985 pdf on jul 1 1985 stanley j farlow published partial differential equations for scientists and engineers find read and cite all the research you need on researchgate

solution manual for partial differential equations for scientists - Jun 01 2022

web a word about the choice of material the constraints imposed by a partial differential equation on its solutions like those imposed by the environment on a living organism

solution manual for partial differential equations for scientists - Jul 02 2022

web stanley j farlow s partial differential equations for scientists and engineers is one of the most widely used textbooks that dover has ever published readers of the many

an introduction to differential equations and their applications - Nov 25 2021

train a deep neural network by minimizing an energy - Apr 30 2022

web dec 1 2016 solution manual partial differential equations for scientists and engineers provides detailed solutions for problems in the textbook partial differential equations

partial differential equations for scientists and engineers - Mar 30 2022

web jul 15 2020 solution manual for partial differential equations for scientists and engineers farlow stanley j 9780486842523 books amazon ca

partial differential equations springerlink - Feb 26 2022

web starting with an introduction to differential equations this insightful text then explores 1st and 2nd order differential equations series solutions the laplace transform systems

pde farlow book solution manual math 5343 - Aug 15 2023

web stanley j farlow partial differential equations solution manual s textbook can be used for a one or two semester course at the junior or senior level it assumes only a

solution manual for partial differential equations for - May 12 2023

web partial differential equations for scientists and engineers 1st edition isbn 9780471086390 alternate isbns stanley j farlow textbook solutions verified chapter

farlow pdes for scientists engineers solutions pdf partial - Jun 13 2023

web jul 15 2020 stanley j farlow courier dover publications jul 15 2020 mathematics 304 pages originally published by john wiley sons in 1982 partial differential

solution manual for partial differential equations for scientists - Sep 04 2022

web buy solution manual for partial differential equations for scientists and engineers dover books on mathematics solution manual by farlow stanley j isbn

partial differential equations for scientists and engineers - Oct 25 2021

solution manual for partial differential equations for scientists - Apr 11 2023

web k x y t g y dy partial differential equations igor yanovsky 200551 for operators of the form t l the fundamental solution of the initial value problem k x t as defined in

partial differential equations graduate level problems and - Feb 09 2023

web sep 23 2021 recollections about ordinary differential equations examples of partial differential equations linear non linear homogeneous inhomogeneous different

partial differential equations for scientists and engineers - Mar 10 2023

web the aim of this is to introduce and motivate partial differential equations pde the section also places the scope of studies in apm346 within the vast universe of mathematics a

jugend und alkohol ein soziales problem grin - Jan 01 2023

web ein soziales problem soziale arbeit sozialarbeit hausarbeit 2014 ebook 12 99 grin aus diesem grund beginne ich meine ausarbeitung mit erläuterungen dieser begriffe nachdem ich die allgemeine bedeutung der jugend erkläre kapitel 2 1 komme ich zu den unterschiedlichen aufgaben die jugendliche in dieser

soziale arbeit mit jungen alkoholabhängigen grund pdf - Aug 08 2023

web soziale arbeit mit jungen alkoholabhängigen grund 1 soziale arbeit mit jungen alkoholabhängigen grund
ordensschwester in der ostschweiz im 20 jahrhundert soziale arbeit mit alkoholabhängigen eltern und deren kindern
geschlecht im sozialen kontext soziale arbeit der umgang mit rückfällen während der suchttherapie mit
soziale gruppenarbeit mit kindern und jugendlichen - Mar 23 2022

web einigen institutionen des sozialen hilfesystems wird als ein besonderer schwerpunkt sozialpädagogische gruppenarbeit
für kinder und jugendliche aus suchtbelasteten familien angeboten laut ingrid arenz greiving 2004 14 gibt es in deutschland
ca 30 bis 40 professionelle hilfsangebote für kinder und jugendliche aus alkoholbelastetenfamilien

soziale arbeit mit jungen alkoholabhängigen grund download - Feb 19 2022

web jungen männern am modell der forel klinik sozialrecht für die soziale arbeit die philosophie sozialer arbeit faktoren der
entstehung und des verlaufs von alkoholabhängigkeit geschlecht nebensache soziale arbeit mit jungen alkoholabhängigen
grund downloaded from ai classmonitor com by guest hudson

soziale arbeit mit jungen alkoholabhängigen grund 2022 - Apr 23 2022

web anforderungen an soziale arbeit kann die soziale arbeit durch primäre alkoholsuchtprävention bei kindern und
jugendlichen einen positiven beitrag zur gesundheit leisten soziale arbeit mit jungen alkoholabhängigen grund downloaded
from smtp ablogtowatch com by guest luciana riley drogen und soziale praxis teil

pdf soziale arbeit mit jungen alkoholabhängigen grund - Oct 30 2022

web soziale arbeit mit jungen alkoholabhängigen grund polytechnisches centralblatt jun 07 2020 pedagogic approaches to
learning and teaching with boys a european perspective feb 08 2023 schriftenreihe über die arbeit mit den jungen pionieren
und schülern für die ferienspiele apr 17 2021

soziale arbeit mit jungen alkoholabhängigen grund 2022 - Aug 28 2022

web soziale arbeit mit jungen alkoholabhängigen grund 1 soziale arbeit mit jungen alkoholabhängigen grund wenn eltern
trinken alkoholabhängigkeit in der familie und ihre auswirkungen auf die kinder alkoholwirkungen auf die familie und
adoleszenz

download solutions soziale arbeit mit jungen alkoholabhängigen grund - Feb 02 2023

web soziale arbeit mit jungen alkoholabhängigen grund mütterliche alkoholabhängigkeit und die kindliche entwicklung
potenzielle auswirkungen und effekte oct 05 2021 bachelorarbeit aus dem jahr 2018 im fachbereich soziale arbeit
sozialarbeit note 1 0 fachhochschule bielefeld sprache deutsch abstract der fokus dieser arbeit richtet

gesundheit zahl der alkoholvergiftungen bei jugendlichen sinkt - May 25 2022

web 20 hours ago hier finden sie informationen zu dem thema gesundheit lesen sie jetzt zahl der alkoholvergiftungen bei
jugendlichen sinkt

soziale arbeit mit jungen alkoholabhängigen grund 2023 wp - Jul 27 2022

web soziale arbeit mit jungen alkoholabhängigen grund a stunning fictional prize filled with raw feelings lies an immersive symphony waiting to be embraced constructed by a masterful composer of

sozialarbeiterische ansätze in suchtsystemen alkohol grin - Nov 30 2022

web kostenlos autor werden sozialarbeiterische ansätze in suchtsystemen alkohol soziale arbeit sozialarbeit diplomarbeit 2006 ebook 16 99 grin

soziale arbeit mit jungen alkoholabhängigen grund 2022 - May 05 2023

web soziale arbeit mit jungen alkoholabhängigen grund berliner debatte initial aufstieg für alle ressourcen im sozialstaat und in der sozialen arbeit konfrontative pädagogik mütterliche alkoholabhängigkeit und die kindliche entwicklung potenzielle auswirkungen und effekte börsenblatt für den deutschen buchhandel

soziale arbeit mit jungen alkoholabhängigen grund copy - Sep 09 2023

web soziale arbeit mit jungen alkoholabhängigen grund alkoholabhängigkeit krankheit oder gesellschaftliches problem kai noack 2010 03 19 studienarbeit aus dem jahr 2009 im fachbereich soziale arbeit sozialarbeit note 2 0 katholische hochschule für sozialwesen berlin sprache deutsch abstract alkohol gilt als kurzbezeichnung des

soziale arbeit mit jungen alkoholabhängigen grund dna viz tpq - Jun 06 2023

web oct 29 2023 soziale arbeit mit jungen alkoholabhängigen der t faktor freizeitpädagogik in der stationären therapeutischen arbeit mit alkoholabhängigen jungen männern am modell der forel klinik wenn eltern trinken alkoholabhängigkeit in der familie berliner debatte initial alkoholabhängigkeit bei jugendlichen mütterliche

soziale unterstützung bei alkoholabhängigen menschen die - Mar 03 2023

web apr 11 2019 liel k 2019 soziale unterstützung bei alkoholabhängigen menschen die perspektive klinischer sozialarbeit in borrmann s fedke c thiessen b eds soziale kohäsion und gesellschaftliche wandlungsprozesse sozialer wandel und kohäsionsforschung springer vs wiesbaden doi org 10 1007 978 3 658 25759

soziale arbeit mit jungen alkoholabhängigen grund checkin - Jul 07 2023

web soziale arbeit mit jungen alkoholabhängigen grund 1 soziale arbeit mit jungen alkoholabhängigen grund wenn eltern trinken alkoholabhängigkeit in der familie alkoholwirkungen auf die familie und adoleszenz konzepte und methoden der sozialen arbeit mit jungen alkoholabhängigen geschlecht im sozialen kontext

pdf soziale arbeit mit jungen alkoholabhängigen grund - Oct 10 2023

web soziale arbeit mit jungen alkoholabhängigen grund aug 26 2020 sozialarbeitswissenschaftliche geschlechterforschung oct 08 2021 sozialarbeitswissenschaftliche geschlechterforschung liefert Erkenntnisse zur ordnenden und regulierenden macht von geschlecht und sexualität mit dieser publikation erfolgt

soziale arbeit mit jungen alkoholabhängigen grund pdf - Sep 28 2022

web konzepte und methoden der sozialen arbeit mit jungen alkoholabhängigen faktoren der entstehung und des verlaufs von alkoholabhängigkeit soziale arbeit mit jungen alkoholabhängigen grund downloaded from eagldemo2 eagltechnology com by guest cooper lynn alkoholabhängigkeit krankheit oder gesellschaftliches problem grin

soziale arbeit mit jungen alkoholabhängigen grund copy - Jun 25 2022

web soziale arbeit mit jungen alkoholabhängigen grund die philosophie sozialer arbeit wenn eltern trinken alkoholabhängigkeit in der familie soziale arbeit die sozialen strukturen von alkoholabhängigen in ihren auswirkungen auf die abhängigkeitsprognose ressourcen im sozialstaat und in der sozialen arbeit clinical guide to alcohol treatment

soziale arbeit mit jungen alkoholabhängigen grund clr imymac - Apr 04 2023

web freizeitpädagogik in der stationären therapeutischen arbeit mit alkoholabhängigen jungen männern am modell der forel klinik sozialrecht für die soziale arbeit wenn eltern trinken alkoholabhängigkeit in der familie

depression and other magic tricks sabrina benaim google - Feb 23 2023

web aug 22 2017 depression other magic tricks is the debut book by sabrina benaim one of the most viewed performance poets of all time whose poem explaining my

depression other magic tricks by sabrina benaim scribd - Sep 20 2022

web audiobook 0 00 free with your audible trial depression other magic tricks is the debut book by sabrina benaim one of the most viewed performance poets of all time

depression other magic tricks button poetry - Jan 25 2023

web jul 26 2020 depression other magic tricks button poetry kindle edition depression other magic tricks is the debut book by sabrina benaim one of the

depression other magic tricks button poetry - Jul 19 2022

web sabrina benaim 75 pages first pub 2017 editions nonfiction poetry emotional fast paced description depression other magic tricks is the debut book by sabrina

depression other magic tricks by sabrina benaim - Nov 10 2021

depression other magic tricks amazon com - May 17 2022

web depression other magic tricks sabrina benaim this collection of poetry on depression family love heartbreak suffering and healing provides the reader with an

depression other magic tricks by sabrina benaim goodreads - Dec 24 2022

web 2017 goodreads choice awards best poetry book runner up depression other magic tricks is the debut book by sabrina

benaim one of the most viewed performance poets

depression other magic tricks button poetry - Mar 27 2023

web aug 18 2017 sabrina benaim goodreads author 3 74 rating details 14 232 ratings 1 667 reviews depression other magic tricks is the debut book by sabrina benaim

depression other magic tricks button poetry kindle edition - Oct 22 2022

web depression other magic tricks sabrina benaim nonfiction poetry emotional fast paced 96 pages we earn commission on any purchases made mark as owned buy

depression other magic tricks by sabrina benaim - Mar 15 2022

web language english publisher exploding pinecone books publication date not specified

editions of depression other magic tricks by sabrina benaim - Jun 29 2023

web depression other magic tricks by sabrina benaim 2017 edition in english depression other magic tricks 2017 edition open library it looks like you re offline

depression other magic tricks by sabrina benaim audible com - Aug 20 2022

web paperback aug 22 2017 depression other magic tricks is the debut book by sabrina benaim one of the most viewed performance poets of all time whose poem

depression other magic tricks by sabrina benaim - Jul 31 2023

web editions for depression other magic tricks 1943735204 paperback published in 2017 kindle edition published in 2020 1943735263 ebook published i

depression other magic tricks sabrina benaim google books - Apr 27 2023

web depression other magic tricks is the debut book by sabrina benaim one of the most viewed performance poets of all time whose poem explaining my depression to my

depression other magic tricks 2017 edition open library - May 29 2023

web depression other magic tricks is the debut book by sabrina benaim one of the most viewed performance poets of all time whose poem explaining my depression to my

depression other magic tricks button poetry english edition - Feb 11 2022

browse editions for depression other magic tricks the - Jun 17 2022

web jul 6 2020 depression other magic tricks button poetry english edition ebook sabrina benaim amazon de kindle store

depression other magic tricks paperback barnes noble - Nov 22 2022

web depression other magic tricks is the debut book by sabrina benaim one of the most viewed performance poets of all time

whose poem explaining my depression to my

depression other magic tricks paperback aug 22 2017 - Apr 15 2022

web depression other magic tricks sabrina benaim 96 pages first pub 2017 isbn uid 9781943735266 format digital language english publisher button poetry

depression other magic tricks sabrina benaim google books - Sep 01 2023

web jul 26 2020 2017 goodreads choice awards best poetry book runner up depression other magic tricks is the debut book by sabrina benaim one of the most viewed

depression other magic tricks by sabrina benaim - Dec 12 2021

depression other magic tricks benaim sabrina author free - Oct 02 2023

web english 75 pages 22 cm depression other magic tricks is the debut book by sabrina benaim one of the most viewed performance poets of all time whose poem

depression other magic tricks lit4school uni leipzig de - Jan 13 2022