

NOTE:

- If a candidate answers a question/vraag TWICE, only mark the FIRST attempt.
- Consistent accuracy applies in all aspects of the marking memorandum.

LET WEL:

- Indien 'n kandidaat 'n vraag TWEE keer beantwoord, merk slegs die EERSTE poging.
- Volgehoue akkuraatheid is DEURGAANS in ALLE aspekte van die memorandum van toepassing.

QUESTION/VRAAG 1

1.1.1	$3x^2 - 4x = 0$ $x(3x - 4) = 0$ $x = \frac{4}{3}$ or $x = 0$	✓ factors ✓ both answers (2)
1.1.2	$x - 6 + \frac{2}{x} = 0$ $x^2 - 6x + 2 = 0$ $x = \frac{-(-6) \pm \sqrt{(-6)^2 - 4(1)(2)}}{2(1)}$ $= \frac{6 \pm \sqrt{28}}{2}$ $x = 0,35$ or $x = 5,65$ OR $x - 6 + \frac{2}{x} = 0$ $x^2 - 6x + 2 = 0$ $(x - 3)^2 = -2 + 9$ $(x - 3) = \pm\sqrt{7}$ $x = 3 \pm \sqrt{7}$ $x = 0,35$ or $x = 5,65$	✓ $x^2 - 6x + 2 = 0$ ✓ subs into correct formula ✓ $x = 0,35$ ✓ $x = 5,65$ (4)
1.1.3	$x^{\frac{2}{3}} = 4$; $x > 0$ $x = (2^2)^{\frac{3}{2}}$ $x = 8$ OR	✓ $x = (2^2)^{\frac{3}{2}}$ ✓ $x = 8$ (2)

Maths Pexemplar Memo 2014

A Loxley



Maths Pexemplar Memo 2014:

Study Guide for CTET Paper 2 (Class 6 - 8 Teachers) Mathematics/ Science with Past Questions Disha
Experts,2020-02-04

Whispering the Secrets of Language: An Psychological Quest through **Maths Pexemplar Memo 2014**

In a digitally-driven earth where monitors reign supreme and quick communication drowns out the subtleties of language, the profound secrets and mental subtleties concealed within words often move unheard. However, nestled within the pages of **Maths Pexemplar Memo 2014** a interesting fictional value pulsating with natural feelings, lies an exceptional quest waiting to be undertaken. Published by an experienced wordsmith, that wonderful opus attracts visitors on an introspective journey, softly unraveling the veiled truths and profound affect resonating within the very fabric of each and every word. Within the emotional depths of this poignant review, we shall embark upon a sincere exploration of the book is core subjects, dissect its captivating publishing design, and succumb to the strong resonance it evokes heavy within the recesses of readers hearts.

https://staging.conocer.cide.edu/public/browse/Download_PDFS/multiplication_table_to_100_x_100.pdf

Table of Contents Maths Pexemplar Memo 2014

1. Understanding the eBook Maths Pexemplar Memo 2014
 - The Rise of Digital Reading Maths Pexemplar Memo 2014
 - Advantages of eBooks Over Traditional Books
2. Identifying Maths Pexemplar Memo 2014
 - 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 Maths Pexemplar Memo 2014
 - User-Friendly Interface
4. Exploring eBook Recommendations from Maths Pexemplar Memo 2014
 - Personalized Recommendations

- Maths Pexemplar Memo 2014 User Reviews and Ratings
- Maths Pexemplar Memo 2014 and Bestseller Lists
- 5. Accessing Maths Pexemplar Memo 2014 Free and Paid eBooks
 - Maths Pexemplar Memo 2014 Public Domain eBooks
 - Maths Pexemplar Memo 2014 eBook Subscription Services
 - Maths Pexemplar Memo 2014 Budget-Friendly Options
- 6. Navigating Maths Pexemplar Memo 2014 eBook Formats
 - ePub, PDF, MOBI, and More
 - Maths Pexemplar Memo 2014 Compatibility with Devices
 - Maths Pexemplar Memo 2014 Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Maths Pexemplar Memo 2014
 - Highlighting and Note-Taking Maths Pexemplar Memo 2014
 - Interactive Elements Maths Pexemplar Memo 2014
- 8. Staying Engaged with Maths Pexemplar Memo 2014
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Maths Pexemplar Memo 2014
- 9. Balancing eBooks and Physical Books Maths Pexemplar Memo 2014
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Maths Pexemplar Memo 2014
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Maths Pexemplar Memo 2014
 - Setting Reading Goals Maths Pexemplar Memo 2014
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Maths Pexemplar Memo 2014
 - Fact-Checking eBook Content of Maths Pexemplar Memo 2014

- 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

Maths Pexemplar Memo 2014 Introduction

Maths Pexemplar Memo 2014 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. Maths Pexemplar Memo 2014 Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. Maths Pexemplar Memo 2014 : 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 Maths Pexemplar Memo 2014 : Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks Maths Pexemplar Memo 2014 Offers a diverse range of free eBooks across various genres. Maths Pexemplar Memo 2014 Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. Maths Pexemplar Memo 2014 Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific Maths Pexemplar Memo 2014, especially related to Maths Pexemplar Memo 2014, 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 Maths Pexemplar Memo 2014, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some Maths Pexemplar Memo 2014 books or magazines might include. Look for these in online stores or libraries. Remember that while Maths Pexemplar Memo 2014, 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 Maths Pexemplar Memo 2014 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 Maths

Pexemplar Memo 2014 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 Maths Pexemplar Memo 2014 eBooks, including some popular titles.

FAQs About Maths Pexemplar Memo 2014 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. Maths Pexemplar Memo 2014 is one of the best book in our library for free trial. We provide copy of Maths Pexemplar Memo 2014 in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Maths Pexemplar Memo 2014. Where to download Maths Pexemplar Memo 2014 online for free? Are you looking for Maths Pexemplar Memo 2014 PDF? This is definitely going to save you time and cash in something you should think about.

Find Maths Pexemplar Memo 2014 :

multiplication table to 100 x 100

murder and mayhem at 614 answer

mv agusta f4 750 oro s s1 1 service manual

my country tis of thee

muscular system study guide answer

mvp the blake boys book english edition

my 20saab 9 3 repair manual

mussel garlic recipe

mx5 manual window conversion
musician appreciation speech
mustang skid steer parts manual
muslims under latin rule 1101300
~~mustang 320 skid steer manual~~
multiplying polynomials algebra 1 tesccc
murder by the invisibles a duke becker mystery

Maths Pexemplar Memo 2014 :

amazon de kundenrezensionen el último partido best seller - Dec 29 2022

web finde hilfreiche kundenrezensionen und rezensionsbewertungen für el último partido best seller auf amazon de lese ehrliche und unvoreingenommene rezensionen von unseren nutzern

download el último partido best seller de john grisham - Nov 27 2022

web mar 27 2021 name el último partido best seller autor john grisham categoria libros literatura y ficción ficción por género tamaño del archivo 14 mb tipos de archivo pdf document idioma español archivos de estado available lee un libro el último partido best seller de john grisham libros gratis en epub

el último partido penguin libros - Jan 30 2023

web el juego ha terminado pero las apuestas nunca han sido mayores neely crenshaw es quizás el mejor quarterback que jamás haya jugado con los spartans de messina el equipo de su instituto han pasado quince años desde aquellos días de gloria y neely ha vuelto a messina para acompañar al entrenador eddie rake en su lecho de muerte el

el último partido best seller ebook john grisham pdf - Apr 20 2022

web apr 27 2018 el último partido best seller ebook john grisham pdf descargar pdf leer en línea el juego ha terminado pero las apuestas nunca ha sido mayores neely crenshaw es quizás el mejor quarterback que jamás haya jugado con los spartans de messina el equipo de su instituto

el último partido best seller bueno hamelyn - May 02 2023

web el último partido best seller bueno 6 39 no description añadir al carrito 6 39

el último partido best seller 9788483469965 ebay - Aug 25 2022

web find many great new used options and get the best deals for el último partido best seller at the best online prices at ebay free shipping for many products

descargar ebook el último partido best seller de john - Jul 24 2022

web oct 26 2020 leer en linea el último partido best seller de john grisham libro pdf epub mobile el último partido best seller torrent lee ahora download el último partido best seller de john grisham descripción reseña del editor el juego ha terminado pero las apuestas nunca ha sido mayores

el último partido best seller grisham john calahorra laura - Aug 05 2023

web el último partido best seller grisham john calahorra laura rins rins calahorra laura amazon es libros

el último partido best seller iberlibro com - Jul 04 2023

web el último partido best seller de grisham john calahorra laura rins en iberlibro com isbn 10 8483469960 isbn 13

9788483469965 bolsillo 2009 tapa blanda

descargar pdf el último partido best seller john gratis - Sep 06 2023

web título el último partido best seller clasificación 3 8 de 5 estrellas 19 valoraciones isbn 10 8483469960 isbn 13

9788483469965 idioma español formato ebook pdf epub kindle audio html y mobi dispositivos compatibles android ios pc y

el último partido best seller mass market paperback amazon de - Jun 03 2023

web el último partido best seller grisham john rins calahorra laura amazon de books

el ultimo partido best seller 2022 mx skylightframe - Feb 16 2022

web el ultimo partido best seller qué fue de los intelectuales españa en Perú 1796 1824 el gobierno de caamaño 1965 sin defensa las explosivas memorias de scottie pippen la conquista del reino maya por la España que sobrevive maniobra de evasión thriller bestseller episodio 5 titulares hashtags y videojuegos lateral el último partido

el ultimo partido john grisham casa del libro colombia - Feb 28 2023

web libro el ultimo partido del autor john grisham al mejor precio nuevo o segunda mano en casa del libro colombia

el último partido best seller taschenbuch 30 mai 2009 amazon de - Apr 01 2023

web el último partido best seller grisham john rins calahorra laura isbn 9788483469965 kostenloser versand für alle bücher mit versand und verkauf durch amazon

download el último partido best seller de john grisham - Sep 25 2022

web mar 24 2021 descargar el último partido best seller de john grisham ebooks pdf epub el último partido best seller descarga gratuita lee ahora download el último partido best seller de john grisham descripción reseña del editor el juego ha terminado pero las apuestas nunca ha sido mayores

el último partido best seller amazon es - Oct 07 2023

web han pasado quince años desde aquellos días de gloria y neely ha vuelto a messina para acompañar al entrenador eddie rake en su lecho de muerte el hombre que convirtió a los spartans en una leyenda imbatible del fútbol americano

el ultimo partido best seller stage gapinc com - Mar 20 2022

web 2 el ultimo partido best seller 2022 05 21 entonces han sido publicadas en los diarios excelsior de méxico y la patria de colombia las dos últimas crónicas a manera de epílogo se refieren a las visitas realizadas en 2008 a las tumbas de dos de mis autores franceses preferidos chateaubriand y

el último partido john grisham google books - Oct 27 2022

web han pasado quince años desde aquellos días de gloria y neely ha vuelto a messina para acompañar al entrenador eddie rake en su lecho de muerte el hombre que convirtió a los spartans en una

el último partido best seller by john grisham konnoi - May 22 2022

web jun 3 2023 we settle for el último partido best seller by john grisham and plentiful books collections from fictions to scientific examinationh in any way reseña del editor el juego ha terminado pero las apuestas nunca ha sido mayores

el ultimo partido by john grisham alibris - Jun 22 2022

web buy el ultimo partido by john grisham online at alibris we have new and used copies available in 1 editions starting at 8 21 shop now

mark scheme results january 2014 physics maths tutor - Jul 07 2023

web mark scheme results january 2014 mark scheme results january 2014 ial chemistry wch02 01 unit 2 application of core principles of chemistry edexcel and

mark scheme results january 2014 pearson qualifications - Nov 18 2021

web mar 6 2014 mark scheme results january 2014 international gcse chemistry 4ch0 paper 2c edexcel level 1 level 2 certificates chemistry kch0 paper 2c edexcel

mark scheme results january 2014 physics maths tutor - Dec 20 2021

web 1 the total number of marks for the paper is 75 2 the edexcel mathematics mark schemes use the following types of marks m marks method marks are awarded for

mark scheme results january 2014 pearson qualifications - May 05 2023

web mar 6 2014 mark scheme results january 2014 ial chemistry wch04 01 unit 4 general principles of chemistry i edexcel and btec qualifications edexcel and btec

mark scheme results june 2014 cdn savemyexams com - Jan 21 2022

web mark scheme results june 2014 gce chemistry 6ch02 01 edexcel and btec qualifications edexcel and btec qualifications come from pearson the world s leading

chemistry assessment unit a2 1 xtrapapers - Jan 01 2023

web january 2014 chemistry assessment unit a2 1 assessing periodic trends and further organic physical and inorganic chemistry ac212 monday 13 january

mark scheme results january 2014 physics maths tutor - Apr 04 2023

web january 2014 ial chemistry wch06 01 unit 6 chemistry laboratory skills ii pmt edexcel and btec qualifications to the mark scheme where some judgement is

mark scheme results june 2014 pearson qualifications - Feb 02 2023

web there is no ceiling on achievement all marks on the mark scheme should be used appropriately all the marks on the mark scheme are designed to be awarded

mark scheme results january 2016 pearson qualifications - Oct 30 2022

web mar 2 2016 m2 oh ignore names 2 mark independently

mark scheme results january 2013 pearson qualifications - Jun 25 2022

web mar 7 2013 mark scheme results january 2013 gce chemistry 6ch04 paper 01 general principles of chemistry i rates equilibria and further organic chemistry

mark scheme results january 2015 pearson qualifications - Mar 03 2023

web all the marks on the mark scheme are designed to be awarded examiners should always award full marks if deserved i e if the answer matches the mark scheme examiners

edexcel international a level chemistry past papers - Aug 08 2023

web jan 2014 unit 2 ms jan 2014 unit 3 jan 2014 unit 4 jan 2014 unit 4 ms jan 2014 unit 5 ms jan 2014 unit 6 jan 2014 unit 6 ms exam paper questions organised

chemistry past papers as a level the tutor academy - Aug 28 2022

web gce 2013 winter english medium chemistry marking scheme gce 2014 winter english medium chemistry prop struct bond ch2 question paper gce 2014 winter

mark scheme results january 2014 mathspi - Sep 28 2022

web 1 the total number of marks for the paper is 75 2 the edexcel mathematics mark schemes use the following types of marks m marks method marks are awarded for

mark scheme results january 2014 tutormyself chemistry - Oct 10 2023

web m2 different numbers of neutrons more neutrons if number of extra neutrons specified it must be 2 reject different numbers of electrons

mark scheme results january 2014 physics maths tutor - Mar 23 2022

web 1 the total number of marks for the paper is 75 2 the edexcel mathematics mark schemes use the following types of marks m marks method marks are awarded for

advanced level chemistry 2014 marking scheme mathspi - Apr 23 2022

web chemistry marking advanced level chemistry 2014 marking scheme largest online education web site in sri lanka provides past papers model papers school papers

edexcel igcse chemistry past papers save my exams - Jun 06 2023

web jan 12 paper 1c qp jan 12 paper 1c ms model answers jan 12 paper 2c qp jan 12 paper 2c ms model answers topic questions free chemistry revision notes on

a level chemistry mark scheme unit 02 chemistry in action - Jul 27 2022

web specification 2420 unit 2 chemistry in action final chem2 mark scheme mark schemes are prepared by the principal examiner and considered together with the

mark scheme results june 2014 cdn savemyexams com - Feb 19 2022

web june 2014 international gce chemistry 6ch02 01r edexcel and btec qualifications edexcel and btec qualifications come from pearson the world s leading learning

mark scheme results january 2014 pearson qualifications - Sep 09 2023

web mar 6 2014 mark scheme results january 2014 mark scheme results january 2014 international gcse chemistry 4ch0 paper 1c science double award 4sc0 paper

a level chemistry mark scheme unit 2 jan 2012 - May 25 2022

web specification 2420 unit 2 chemistry in action final chem2 mark scheme mark schemes are prepared by the principal examiner and considered together with the

mark scheme results june 2014 pearson qualifications - Nov 30 2022

web all marks on the mark scheme should be used appropriately all the marks on the mark scheme are designed to be awarded examiners should always award full marks if

how to program a single layer perceptron in matlab quora - Feb 26 2022

web how to program a single layer perceptron in matlab quora something went wrong

how to design a single layer perceptron with matlab built - Mar 30 2022

web mar 18 2022 i want to design a single layer perceptron and to track the accuracy of the validation test and the train datasets but i don t know where to start is there a matlab built in function where i could do it or how do i write it in code

matlab single layer perceptron output cross validated - Sep 04 2022

web all that being said the above isn t really the standard perceptron algorithm normally the output for a perceptron is given by $f(x) = \sum_i w_i x_i$ where i is the indicator function in this case you can learn the parameters using subgradient descent which results in an update of the form

simple single layer binary classifier matlab perceptron - Aug 15 2023

web perceptrons are simple single layer binary classifiers which divide the input space with a linear decision boundary
 perceptrons can learn to solve a narrow range of classification problems they were one of the first neural networks to reliably solve a given class of problem and their advantage is a simple learning rule

github mathworks teaching resources single layer multilayer - Apr 11 2023

web sep 8 2021 this matlab demo introduces fundamental concepts of neural networks in an intuitive and hands on manner from single layer neural networks and corresponding learning algorithms to multilayer perceptrons it is meant to be used in class or by those interested in an intuitive understanding of these theoretical concepts

perceptron file exchange matlab central mathworks - Apr 30 2022

web sep 6 2023 perceptron implement the perceptron algorithm whose weight update rule is given by where n is the learning rate parameter train your perceptron using the dataset in file data2.txt for n in the range 0.0007 to 0.0017 with a step of 0.0001 each row in the file represents one input vector the first 2 columns correspond to the input

implementing and plotting a perceptron in matlab - Oct 05 2022

web may 10 2011 i'm reviewing a code from toronto perceptron matlab code the code is function w_perceptron(x,y,w_init) w_init for iteration 1 to 100 in practice use some stopping criterion for ii=1:size(x,2) cycle through training set if sign(w(ii,y(ii))) wrong decision

single layer perceptron code matlab of artificial neural network - Jan 28 2022

web single layer perceptron code matlab of artificial neural network algorithm tags machine learning single layer perceptron matlab code implementation or operation college student experiment i implement the and operation 1 when using a *code for 3 class classifier single layer perceptron in matlab* - Nov 06 2022

web sep 4 2014 modified 1 year 3 months ago viewed 2k times 1 for identifying 3 classes i have taken 3 single layer perceptron such that if data belongs to class 1 then perceptron1=1 perceptron2=0 perceptron3=0 if data belongs to class 2 then perceptron1=0 perceptron2=1 perceptron3=0

matlab code for single layer perceptron model mathworks - Jan 08 2023

web aug 1 2011 i am looking for a matlab code for a single layer perceptron model the code should be able to cater for the following load sample input patterns load sample output patterns initialise weights set learning rate calculate output calculate error update weights convert error to absolute value display network

single layer perceptron github topics github - Mar 10 2023

web jan 16 2023 single layer perceptron star here are 31 public repositories matching this topic language all sort most stars amacaluso quantum single layer perceptron star 8 code issues pull requests

classification with a two input perceptron matlab simulink - Dec 07 2022

web answers trial software product updates classification with a two input perceptron a two input hard limit neuron is trained to classify four input vectors into two categories each of the four column vectors in x defines a two element input vectors and a row vector t defines the vector s target categories we can plot these vectors with plotpv

neural networks a perceptron in matlab matlab geeks - Feb 09 2023

web may 11 2011 a simple single layer feed forward neural network which has a to ability to learn and differentiate data sets is known as a perceptron by iteratively learning the weights it is possible for the perceptron to find a solution to linearly separable data data that can be separated by a hyperplane

machine learning classify data with a perceptron in matlab - Aug 03 2022

web feb 12 2017 the single layer perceptron is a linear binary classifier that does not converge when the data is not linearly separable if we plot the data we get both classes are overlapping we can solve this use by adding a tolerance to your function generaterandomdata m

mastering multiclass classification with single layer medium - Jul 02 2022

web apr 12 2023 a single layer perceptron consists of an input layer connected to an output layer for a multiclass classification problem the output layer has c neurons one for each class the input features are multiplied by the weights *perceptron neural networks matlab simulink mathworks* - Jul 14 2023

web the perceptron network consists of a single layer of s perceptron neurons connected to r inputs through a set of weights w_{ij} as shown below in two forms as before the network indices i and j indicate that w_{ij} is the strength of the connection from the

single layer and multilayer perceptrons demo file exchange matlab - Jun 13 2023

web sep 8 2021 single layer and multilayer perceptrons demo this matlab demo introduces fundamental concepts of neural networks in an intuitive and hands on manner from single layer neural networks and corresponding learning algorithms to

neural network single layer perceptron stack overflow - Jun 01 2022

web mar 1 2017 single layer perceptron ask question asked 6 years 4 months ago modified 6 years 4 months ago viewed 161 times 0 i m trying to train an slp with a heavyside function for a two class problem on matlab my inputs are 00 01 10 and 11 for a target values of 1 1 this is the code i ve tried so far

single layer perceptron neural network file exchange matlab - May 12 2023

web apr 27 2020 single layer perceptron neural network define two distributions as two classes sample 1000 points from two distributions and define their class labels create a linear classification model initialize random weights

how to create a multi layer perceptron in matlab for a multi class - Dec 27 2021

web jan 30 2016 you have only one input connected to the first layer so put 1 0 here layerconnect the vector has dimensions

numlayers by numlayers you have two layers the first layer is connected to the second one but not to itself there is no connection going from the second layer to the first one and the second layer does not feed itself put 0 0