

GAUTENG DEPARTMENT OF EDUCATION
PREPARATORY EXAMINATION

PROOFREAD ☐	DATE _____
SIGNATURE _____	
PROOFREAD ☐	DATE _____
SIGNATURE _____	

MATHEMATICS
(First Paper)

MEMORANDUM

QUESTION 1 [14]

1.1 $x(x+2) = 0$
 $x = 0$ or $x = -2$

1A factorizing
2 CA for each answer

[3]

1.2 $x \leq -2$ or $x \geq 0$; with $x > 0$
 $\therefore x > 0$

2CA for each inequality
(-1) if "<" is used
1CA for selecting correct inequality
Full marks for answer only.

[3]

1.3
$$x = \frac{-(-3) \pm \sqrt{(-3)^2 - 4(2)(-7)}}{2(2)}$$

$$x = \frac{3 \pm \sqrt{65}}{4}$$

 $x = 2.77$ or $x = -1.27$

1A substitution into correct formula

$\frac{2}{3}$ if left in surd form

2CA for each correct answer

[3]

1.4 $1 + 2^{n-2} + 2^{n-1} + 2^n = 53$
 $2^n(2^{-2} + 2 + 1) = 52$
 $2^n = 16$
 $n = 4$

1A for $2^0 = 1$
1A for factorizing
1A for RHS
1CA
1CA

[5]

QUESTION 2 [10]

2.1.1 $(x+1)^2 - 4 = 16$
 $(x+1)^2 = 20$
 $x+1 = \pm\sqrt{20}$
 $x = \pm 2\sqrt{5} - 1$

OR

$(x+1)^2 - 4 = 16$
 $x^2 + 2x - 19 = 0$
$$x = \frac{-2 \pm \sqrt{(2)^2 - 4(-19)}}{2}$$

 $x = \pm 2\sqrt{5} - 1$

1A squaring both sides
1CA for isolating complete square
1M for taking square root
2CA for each answer

1A squaring both sides
1CA simplification
1CA substitution into correct formula

2CA for each answer

[5]

2.1.2 $k = 0$

1A

[1]

Gauteng Preparatory Exam Mathematics Paper Memorandum 2014

JL Elias



Gauteng Preparatory Exam Mathematics Paper Memorandum 2014:

The Enigmatic Realm of **Gauteng Preparatory Exam Mathematics Paper Memorandum 2014**: 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 in short supply of extraordinary. Within the captivating pages of **Gauteng Preparatory Exam Mathematics Paper Memorandum 2014** a literary masterpiece penned with 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's core themes, assess its distinct writing style, and delve into its lasting affect the hearts and minds of those who partake in its reading experience.

https://staging.conocer.cide.edu/data/publication/default.aspx/Granola_Recipe_Flax_Raisins_Almonds.pdf

Table of Contents Gauteng Preparatory Exam Mathematics Paper Memorandum 2014

1. Understanding the eBook Gauteng Preparatory Exam Mathematics Paper Memorandum 2014
 - The Rise of Digital Reading Gauteng Preparatory Exam Mathematics Paper Memorandum 2014
 - Advantages of eBooks Over Traditional Books
2. Identifying Gauteng Preparatory Exam Mathematics Paper Memorandum 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 Gauteng Preparatory Exam Mathematics Paper Memorandum 2014
 - User-Friendly Interface
4. Exploring eBook Recommendations from Gauteng Preparatory Exam Mathematics Paper Memorandum 2014
 - Personalized Recommendations
 - Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 User Reviews and Ratings

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

Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 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 Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 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 Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 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 Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 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 Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 Books

1. Where can I buy Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 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 Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 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 Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 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 Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 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 Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 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 Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 :

granola recipe flax raisins almonds

grammar lesson 9 adverbs answer

grandmaster chess strategy what amateurs can learn from ulf andersson

grademarch common paper maths

graphic organizer for animal report 2nd grade

gradpoint english iv answers

gratis s romans

gradpoint math 1answers

~~gradual release model lesson template~~

~~grands arrts jurisprudence administrative 20e~~

gramophone good cd guide

graphing quadratic equations gina wilson 2013

grasshopper weed eater manual

graph match tesccc unit precalculus

gradle effective implementation guide ikkink hubert klein

Gauteng Preparatory Exam Mathematics Paper Memorandum 2014 :

2023 free notary exam ca state pre test website - Dec 07 2022

web california notary state exam practice exam 2023 notary public 2023 state exam pre exam free notary classes 24 7
california notary state exam practice exam 2023 top of page 0 916 796 8111 877 98 notary you will have immediate access to
100 new notary exam questions for the year 2023 the cost is 49

free california notary exam practice 2023 prep guide - Sep 16 2023

web jan 28 2020 free california notary exam practice a 2023 prep guide by iprep check out our free ca notary exam sample
questions and ace your test

free california notary exam practice 2023 prep guide - Jun 13 2023

web free ca notary exam practice a 2023 prep guide by iprep check out our free ca notary exam sample questions and ace
get test

free sample questions cal notary world pdf uniport edu - Jan 28 2022

web aug 2 2023 free sample questions cal notary world 1 5 downloaded from uniport edu ng on august 2 2023 by guest free
sample questions cal notary world yeah reviewing a book free sample questions cal notary world could build up your close
associates listings this is just one of the solutions for you to be successful as

california notary public exam questions what i wish i knew - Oct 05 2022

web mar 28 2022 in this video i ll be sharing tips and strategies to help you pass the california notary public exam with
flying colors the exam is a crucial step in becom

free sample questions cal notary world pdf - Apr 30 2022

web title free sample questions cal notary world pdf aveannamedicalsolutions buyerads com author dudley lydia created date
10 11 2023 12 02 50 am

free sample questions cal notary world pdf pdf - Aug 03 2022

web swaranjit singh 2017 06 11 the book contains 200 sample questions and answers to prepare applicants to pass the
california state notary public examination to obtain their notary public commission an all out effort

exam prep practice exam calnotaryclass com - Sep 04 2022

web the technical storage or access is strictly necessary for the legitimate purpose of enabling the use of a specific service explicitly requested by the subscriber or user or for the sole purpose of carrying out the transmission of a communication over an electronic communications network

cost free california notary quiz practice 2023 prep guide - Jul 14 2023

web free california secretary try practice a 2023 prep guide by iprep check out our free ca notary exam sample questions plus ace your test

california notary practice exam 2023 notary public seminars - Feb 09 2023

web are you ready to pass your official california state exam use these 3 tools to give you the edge you need to pass on the first attempt current practice exam key points study guide ca notary fines cheat sheet

free sample questions cal notary world pdf uniport edu - Mar 30 2022

web aug 15 2023 notice free sample questions cal notary world can be one of the options to accompany you when having additional time it will not waste your time receive me the e book will no question tell you

220 california notary public test q a 2023 free access - Aug 15 2023

web ans the entire state of ca q a possible penalty for committing perjury is ans 2 years in prison 3 years in prison 4 years in prison q you have how many days to take your oath of office after your commencement date ans 30 days q if you request a new certificate of authorization the state of california must respond within ans 5 days

notary free practice exam 2022 notary classes website - Apr 11 2023

web take our free 2022 2023 practice notary exam three separate exams to test your knowledge state exam increases fom 30 to 45 questions notary classes available 24 7

free sample questions cal notary world pdf - Feb 26 2022

web free sample questions cal notary world yeah reviewing a ebook free sample questions cal notary world could ensue your near connections listings this is just one of the solutions for you to be successful as understood achievement does not suggest that you have fabulous points

california notary practice exam questions 2020 flashcards - Jan 08 2023

web study with quizlet and memorize flashcards containing terms like since there is no prescribed wording for an oath what would be an acceptable oath to clear a background check the state law requires all applicants to be in which county does the notary applicant take subscribe and file an oath of office and file a 15 000 surety bond and

online practice exam questions notaries unlimited - May 12 2023

web studying these questions will prepare you to pass the california notary exam learn the answers to each question and the

reasoning behind the question answer the questions without looking at any notes and then review do this practice exam over until you are getting at least 90 correct

notary practice test california 2023 calnotaryclass com - Mar 10 2023

web a good practice exam can help the potential notary public to test their knowledge by answering practice exam questions to help the test taker to know what material needs to be studied in more detail and a free notary exam practice test is [free california notary exam practice 2023 preview guide](#) - Nov 06 2022

web jan 28 2020 available california law exam practice a 2023 preparation guide for iprep get out our free ca notary examination sample questions and ace your test

[free sample questions cal notary world pdf uniport edu](#) - Jun 01 2022

web jun 30 2023 this info get the free sample questions cal notary world associate that we manage to pay for here and check out the link you could purchase lead free sample questions cal notary world or get it as soon as feasible you could quickly download this free sample questions cal notary world after getting deal so considering you require

[free sample questions cal notary world pdf 2023](#) - Jul 02 2022

web free sample questions cal notary world pdf is understandable in our digital library an online entrance to it is set as public fittingly you can download it instantly our digital library saves in complex countries allowing you to acquire the most less latency era to download any of our books

professional waiter waitress training manual with 101 sop - Jul 27 2022

web the waiter and waitress training manual 164 pages server training manual one wait and waitress training manual 164 pages 1978 4 46 mb english by mitchell

training manual for waiters rasa - Jun 06 2023

web this professional waiter waitress training manual with 101 sop will be a great learning tool for both novice and professional hoteliers this is an ultimate practical

[the waiter and waitress training manual dahmer sondra j](#) - Mar 23 2022

[5 tips for training waiters restaurantware](#) - Feb 02 2023

web server training manual jonathan s restaurant 6 server training whenever you are reaching across someone or serving in front of someone excuse yourself always keep

the waiter waitress and waitstaff training handbook a - May 25 2022

waiters training manual pdf alcoholic drinks drink - Jan 01 2023

web this new training handbook was designed for use by all food service serving staff members the guide covers every aspect of restaurant customer service for the positions of host

the waiter waitress and waitstaff training handbook - Sep 09 2023

web professional waiter waitress training manual with 101 sop 1st edition is a great learning tool for novice hospitality students and also a useful reference material for

waiters training manual qvndw31ymrlx documents and e books - Nov 18 2021

professional waiter waitress training manual with 101 sop - Aug 08 2023

web revised edition mitchell barbara j this manual is intended for use in pre employment or upgrading training programs for persons who are planning to work or are presently

the waiter and waitress training manual 164 pages the art of - Jan 21 2022

waiter training guide learn food beverage service - Jul 07 2023

web this manual deals with the training of the food and beverage service personnel the most important person around whom food and beverage service pivots is the waiter who is

waiter training guide learn food beverage service - Feb 19 2022

restaurant server training 9 waiter waitress training - May 05 2023

web eric education resources information center

the waiter and waitress training manual revised edition - Mar 03 2023

web oct 5 2013 professional waiter waitress training manual with 101 sop 1st edition is a self study practical food beverage training guide for all food and beverage

waiters training manual pdf document - Oct 10 2023

web jul 13 2015 waiters and waitresses job jumpstart waiters and waitresses waiters and waitresses serve food and beverages in hotels restaurants cafés clubs and dining

professional waiter waitress training manual pdf - Apr 04 2023

web make your restaurant server training accessible for everyone through our powerful mobile app we ll automatically take your free restaurant server training manual pdf and turn

eric ed246305 the waiter and waitress training - Nov 30 2022

web a restaurant training manual can help make training new staffers an easier and faster process acting as a single source

of truths for your restaurant procedures dress code

the waiter and waitress training manual 164 pages - Dec 20 2021

server training manual jonathan s ogunquit - Jun 25 2022

web this manual deals with the training of the food and beverage service personnel the most important person around whom food and beverage service pivots is the waiter who is

restaurant training manual template how to guide the - Apr 23 2022

professional waiter waitress training manual - Oct 30 2022

web the waiter and waitress training manual dahmer sondra j free download borrow and streaming internet archive

eric education resources information center - Sep 28 2022

web supreme free waiter and waitress training guide click present the downloads farad or b service course click get until download premium housekeeping course click

free training manual for restaurant server and mobile edapp - Aug 28 2022

web the waiter and waitress training manual 164 pages the art of hosting the complete training guide for waiters and the waiter and waitress training manual 164 pages

study guides history channel - May 31 2022

web the ultimate review packet has everything you need to learn and practice ap us history exclusive review videos with tips strategies and content study guides and

unit 1 us history study guide flashcards studyhippo com - Jan 27 2022

web us history quiz thanks for visiting us history quiz our goal is to help students learn more about american history in a fun and interactive way whether you are in middle

ap us history ultimate review packet - Apr 29 2022

web a in what ways and to what extent have changes in markets transportation and technology affected american society b in what ways and to what extent have different systems

ap us history study guide periods and themes - Aug 02 2022

web check out study guides for america the story of us and learn the history behind how america was invented only on history com

can you correctly answer these easy medium and hard u s - Oct 24 2021

web 1777 12 on the us flag the 50 stars glorifying represent the 50 states of the united states of america while the 13 stripes

on the flag are the emblem of the thirteen british

us history free study guide simple studies - Feb 08 2023

web us history us history here s a 39 page study guide for us history this guide covers many topics from colonial america to the civil rights movement in the 1960s

answer key chapter 1 u s history openstax - Aug 14 2023

web chapter 1 chapter 1 highlights 1 a 3 b 5 a 7 a 9 it was known that the earth was round so columbus s plan seemed plausible the distance he would need to travel was not

history study guides sparknotes - Mar 09 2023

web history writing a paper on how europe came to be or what united the states we explain the revolutions wars and social movements that shaped american and european history

g eorgia m ilestone s georgia department of education - Nov 24 2021

web for a country that s only been around for less than 250 years the united states sure has left an impact on the world thus far as it s gone from 13 colonies to a world power do

u s history final exam study guide flashcards quizlet - Jun 12 2023

web study with quizlet and memorize flashcards containing terms like declaration of independence revolutionary war articles of the confederation vs the us constitution

u s history study guide answer key answers for 2023 exams - Nov 05 2022

web american history study guide answer key flashcards quizlet start studying american history study guide answer key learn vocabulary terms and more with

american history study guide answer key flashcards quizlet - Jan 07 2023

web study with quizlet and memorize flashcards containing terms like which action showed that president andrew johnson did not support greater rights for african americans in the

40 us history trivia questions and answers english quiz test - Sep 22 2021

ap u s history study guides cisd - Mar 29 2022

web begin your journey through us history with the videos timelines primary sources and essays below period 1 1491 1607 on a north american continent controlled by

assignments mr yamron s honors united states history - Sep 03 2022

web eoc practice exam and answers eoc ush practice test eoc ush practice test answers eoc review worksheets us history eoc worksheets part i us

ap us history study guide from the gilder lehrman institute of - Feb 25 2022

web jul 8 2022 unit 1 us history study guide flashcards get access to high quality and unique 50 000 college essay examples and more than 100 000 flashcards and test

us history quiz free american history practice questions - Dec 26 2021

web overview of the united states history eoc assessment georgia milestones united states history eoc study resource guide for students and parents page 9 of 102 level

american history questions and answers homework study com - Oct 04 2022

web american history questions and answers facing a tricky u s history problem study com has answers to your toughest u s history homework questions explained

american history study guide flashcards quizlet - Dec 06 2022

web learn test match created by timothy branson teacher terms in this set 60 many freed slaves continued to work for large plantation owners what negative effect did

america the story of us study guides history channel - Jul 01 2022

web the american presidency with bill clinton separate but unequal study guide black patriots heroes of the civil war education guide abraham lincoln education guide

u s history exam study guide flashcards quizlet - May 11 2023

web 1 78 flashcards learn test match created by 13koehle 2011 history exam study guide terms in this set 78 missouri compromise of 1820 this determined whether slavery will

u s history study resources answers - Jul 13 2023

web learn u s history check your homework study for exams and boost your grades with help from q a verified answers and study guides

us history unit 1 test and answers flashcards quizlet - Apr 10 2023

web study with quizlet and memorize flashcards containing terms like not enough indentured servants tobacco first attempt at self government and more fresh features from the