



MARKSCHEME

May 2008

MATHEMATICAL STUDIES

Standard Level

Paper 2

N14 Matsd Sp2 Eng Tz1

Victor M. Corman



N14 Matsd Sp2 Eng Tz1:

Embark on a transformative journey with Written by is captivating work, Grab Your Copy of **N14 Matsd Sp2 Eng Tz1** . This enlightening ebook, available for download in a convenient PDF format Download in PDF: , invites you to explore a world of boundless knowledge. Unleash your intellectual curiosity and discover the power of words as you dive into this riveting creation. Download now and elevate your reading experience to new heights .

https://splashdogs.com/book/Resources/Download_PDFS/give%20me%20liberty%20eric%20foner%203rd%20edition.pdf

Table of Contents N14 Matsd Sp2 Eng Tz1

1. Understanding the eBook N14 Matsd Sp2 Eng Tz1
 - The Rise of Digital Reading N14 Matsd Sp2 Eng Tz1
 - Advantages of eBooks Over Traditional Books
2. Identifying N14 Matsd Sp2 Eng Tz1
 - 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 N14 Matsd Sp2 Eng Tz1
 - User-Friendly Interface
4. Exploring eBook Recommendations from N14 Matsd Sp2 Eng Tz1
 - Personalized Recommendations
 - N14 Matsd Sp2 Eng Tz1 User Reviews and Ratings
 - N14 Matsd Sp2 Eng Tz1 and Bestseller Lists
5. Accessing N14 Matsd Sp2 Eng Tz1 Free and Paid eBooks
 - N14 Matsd Sp2 Eng Tz1 Public Domain eBooks
 - N14 Matsd Sp2 Eng Tz1 eBook Subscription Services
 - N14 Matsd Sp2 Eng Tz1 Budget-Friendly Options

6. Navigating N14 Matsd Sp2 Eng Tz1 eBook Formats
 - ePub, PDF, MOBI, and More
 - N14 Matsd Sp2 Eng Tz1 Compatibility with Devices
 - N14 Matsd Sp2 Eng Tz1 Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of N14 Matsd Sp2 Eng Tz1
 - Highlighting and Note-Taking N14 Matsd Sp2 Eng Tz1
 - Interactive Elements N14 Matsd Sp2 Eng Tz1
8. Staying Engaged with N14 Matsd Sp2 Eng Tz1
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers N14 Matsd Sp2 Eng Tz1
9. Balancing eBooks and Physical Books N14 Matsd Sp2 Eng Tz1
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection N14 Matsd Sp2 Eng Tz1
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine N14 Matsd Sp2 Eng Tz1
 - Setting Reading Goals N14 Matsd Sp2 Eng Tz1
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of N14 Matsd Sp2 Eng Tz1
 - Fact-Checking eBook Content of N14 Matsd Sp2 Eng Tz1
 - 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

N14 Matsd Sp2 Eng Tz1 Introduction

In today's digital age, the availability of N14 Matsd Sp2 Eng Tz1 books and manuals for download has revolutionized the way we access information. Gone are the days of physically flipping through pages and carrying heavy textbooks or manuals. With just a few clicks, we can now access a wealth of knowledge from the comfort of our own homes or on the go. This article will explore the advantages of N14 Matsd Sp2 Eng Tz1 books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of N14 Matsd Sp2 Eng Tz1 books and manuals for download is the cost-saving aspect. Traditional books and manuals can be costly, especially if you need to purchase several of them for educational or professional purposes. By accessing N14 Matsd Sp2 Eng Tz1 versions, you eliminate the need to spend money on physical copies. This not only saves you money but also reduces the environmental impact associated with book production and transportation. Furthermore, N14 Matsd Sp2 Eng Tz1 books and manuals for download are incredibly convenient. With just a computer or smartphone and an internet connection, you can access a vast library of resources on any subject imaginable. Whether you're a student looking for textbooks, a professional seeking industry-specific manuals, or someone interested in self-improvement, these digital resources provide an efficient and accessible means of acquiring knowledge. Moreover, PDF books and manuals offer a range of benefits compared to other digital formats. PDF files are designed to retain their formatting regardless of the device used to open them. This ensures that the content appears exactly as intended by the author, with no loss of formatting or missing graphics. Additionally, PDF files can be easily annotated, bookmarked, and searched for specific terms, making them highly practical for studying or referencing. When it comes to accessing N14 Matsd Sp2 Eng Tz1 books and manuals, several platforms offer an extensive collection of resources. One such platform is Project Gutenberg, a nonprofit organization that provides over 60,000 free eBooks. These books are primarily in the public domain, meaning they can be freely distributed and downloaded. Project Gutenberg offers a wide range of classic literature, making it an excellent resource for literature enthusiasts. Another popular platform for N14 Matsd Sp2 Eng Tz1 books and manuals is Open Library. Open Library is an initiative of the Internet Archive, a non-profit organization dedicated to digitizing cultural artifacts and making them accessible to the public. Open Library hosts millions of books, including both public domain works and contemporary titles. It also allows users to borrow digital copies of certain books for a limited period, similar to a library lending system. Additionally, many universities and educational institutions have their own digital libraries that provide free access to PDF books and manuals. These libraries often offer academic texts, research papers, and technical manuals, making them invaluable resources for students and researchers. Some notable examples include MIT OpenCourseWare, which offers free access to course materials from the Massachusetts Institute of Technology, and the

Digital Public Library of America, which provides a vast collection of digitized books and historical documents. In conclusion, N14 Matsd Sp2 Eng Tz1 books and manuals for download have transformed the way we access information. They provide a cost-effective and convenient means of acquiring knowledge, offering the ability to access a vast library of resources at our fingertips. With platforms like Project Gutenberg, Open Library, and various digital libraries offered by educational institutions, we have access to an ever-expanding collection of books and manuals. Whether for educational, professional, or personal purposes, these digital resources serve as valuable tools for continuous learning and self-improvement. So why not take advantage of the vast world of N14 Matsd Sp2 Eng Tz1 books and manuals for download and embark on your journey of knowledge?

FAQs About N14 Matsd Sp2 Eng Tz1 Books

What is a N14 Matsd Sp2 Eng Tz1 PDF? A PDF (Portable Document Format) is a file format developed by Adobe that preserves the layout and formatting of a document, regardless of the software, hardware, or operating system used to view or print it. **How do I create a N14 Matsd Sp2 Eng Tz1 PDF?** There are several ways to create a PDF: Use software like Adobe Acrobat, Microsoft Word, or Google Docs, which often have built-in PDF creation tools. Print to PDF: Many applications and operating systems have a "Print to PDF" option that allows you to save a document as a PDF file instead of printing it on paper. Online converters: There are various online tools that can convert different file types to PDF. **How do I edit a N14 Matsd Sp2 Eng Tz1 PDF?** Editing a PDF can be done with software like Adobe Acrobat, which allows direct editing of text, images, and other elements within the PDF. Some free tools, like PDFescape or Smallpdf, also offer basic editing capabilities. **How do I convert a N14 Matsd Sp2 Eng Tz1 PDF to another file format?** There are multiple ways to convert a PDF to another format: Use online converters like Smallpdf, Zamzar, or Adobe Acrobats export feature to convert PDFs to formats like Word, Excel, JPEG, etc. Software like Adobe Acrobat, Microsoft Word, or other PDF editors may have options to export or save PDFs in different formats. **How do I password-protect a N14 Matsd Sp2 Eng Tz1 PDF?** Most PDF editing software allows you to add password protection. In Adobe Acrobat, for instance, you can go to "File" -> "Properties" -> "Security" to set a password to restrict access or editing capabilities. Are there any free alternatives to Adobe Acrobat for working with PDFs? Yes, there are many free alternatives for working with PDFs, such as: LibreOffice: Offers PDF editing features. PDFsam: Allows splitting, merging, and editing PDFs. Foxit Reader: Provides basic PDF viewing and editing capabilities. How do I compress a PDF file? You can use online tools like Smallpdf, ILovePDF, or desktop software like Adobe Acrobat to compress PDF files without significant quality loss. Compression reduces the file size, making it easier to share and download. Can I fill out forms in a PDF file? Yes, most PDF viewers/editors like Adobe Acrobat, Preview (on Mac),

or various online tools allow you to fill out forms in PDF files by selecting text fields and entering information. Are there any restrictions when working with PDFs? Some PDFs might have restrictions set by their creator, such as password protection, editing restrictions, or print restrictions. Breaking these restrictions might require specific software or tools, which may or may not be legal depending on the circumstances and local laws.

Find N14 Matsd Sp2 Eng Tz1 :

~~give me liberty eric foner 3rd edition~~

~~giver literature guide 2008 secondary solutions answers~~

glock 17 gen 3 owners manual

global conflict allied successes answers

~~gleaner k manual~~

giver study guide questions and answers johnson

~~glaze recipe formulae~~

~~gitnit top heavy frame~~

glovers reef travel guide

glencoe answer key for animal farm study guide

gizmo seasons earth moon and sun key

~~glencoe science worksheets answers~~

global history regents june 2015 study guide

glennon doyle melton book

global service information center toyota 79 series

N14 Matsd Sp2 Eng Tz1 :

selected papers on design of algorithms csli lecture notes - Dec 24 2022

selected papers from the 19th international conference on micro and nano technology for power generation and energy conversion applications power mems 2019 proceedings of

selected papers on design of algorithms anna s archive - Jul 31 2023

english en djvu 4 1mb knuth d e selected papers on design of algorithms csli lect notes 191 csli 2010 600dpi t o 469s csal

djvu selected papers on design of

selected papers on design of algorithms csli publications - Oct 02 2023

the present volume the seventh in a series of his collected papers is devoted to his work on the design of new algorithms nearly thirty of knuth's classic papers are collected in this book

selected papers on design of algorithms csli lect api4 nocvedcu - Nov 22 2022

apr 22 2023 we provide selected papers on design of algorithms csli lect and numerous book collections from fictions to scientific research in any way among them is this selected

selected papers on design of algorithms csli lect pdf - Mar 15 2022

the construction of algorithms for various data analysis tasks design construction prediction sensitivity analysis calibration among others and the development of web based repositories

selected papers on design of algorithms csli lect pdf - Mar 27 2023

selected papers on design of algorithms csli lect 1 13 downloaded from uniport edu ng on june 15 2023 by guest selected papers on design of algorithms csli lect this is likewise

selected papers on design of algorithms csli lect - Feb 11 2022

sep 2 2023 selected papers on design of algorithms csli lect is available in our book collection an online access to it is set as public so you can get it instantly our digital library

selected papers on analysis of algorithms csli lecture notes - Jan 25 2023

papers on analysis of algorithms 5 selected papers on discrete mathematics 6 selected papers on puter languages 7 selected papers on design of algorithms 8 selected papers

seçkin algoritma ve c programlama erhan arı seçkin yayınlar - Jul 19 2022

question papers for university of pune semester 1 design and analysis of algorithms question paper gives an idea about the questions coming in the board exams and previous years

selected papers on design of algorithms csli lect uniport edu - Dec 12 2021

selected papers on design of algorithms csli lect store spiralny - Aug 20 2022

etiketler seçkin yayıncılık 9789750242984 algoritma ve c programlama algoritma ve c programlama pdf örneklerle algoritma ve c programlama erhan arı seçkin algoritma ve c

selected papers on design of algorithms csli lect pdf - May 29 2023

jul 27 2023 kindly say the selected papers on design of algorithms csli lect is universally compatible with any devices to read selected papers on computer aided design of analog

selected papers on design of algorithms web stanford edu - Jun 29 2023

the present volume the seventh in a series of his collected papers is devoted to his work on the design of new algorithms nearly thirty of knuth s classic papers are collected in this book

selected papers on design of algorithms csli lect pdf - May 17 2022

sep 1 2023 selected papers on design of algorithms csli lect is friendly in our digital library an online access to it is set as public consequently you can download it instantly

selected papers on design of algorithms csli lect - Oct 22 2022

sep 11 2023 if you ally habit such a referred selected papers on design of algorithms csli lect book that will find the money for you worth get the certainly best seller from us currently

selected papers on design of algorithms csli lect uniport edu - Jan 13 2022

aug 7 2023 selected papers on design of algorithms csli lect 1 8 downloaded from uniport edu ng on august 7 2023 by guest
selected papers on design of algorithms csli

selected papers on design of algorithms csli lect pdf - Sep 20 2022

selected papers from the 19th international conference on micro and nano technology for power generation and energy conversion applications power mems 2019 selected

selected papers on design of algorithms knuth - Feb 23 2023

may 1 2002 review selected papers on analysis of algorithms csli lecture notes number 102 may 2001 the computer bulletin greg michaelson pdf not available find read

selected papers on design of algorithms djvu - Apr 27 2023

contact 1243 schamberger freeway apt 502port orvilleville on h8j 6m9 719 696 2375 x665 email protected

design and analysis of algorithms 2011 2012 m sc computer - Jun 17 2022

sep 16 2023 selected papers on design of algorithms csli lect 3 11 downloaded from uniport edu ng on september 16 2023 by guest algorithms to solve complex optimization

knuth selected papers on design of algorithms - Sep 01 2023

selected papers on design of algorithms by donald e knuth stanford california center for the study of language and information 2010 xvi 453pp csli lecture notes no 191

selected papers on design of algorithms csli lect pdf - Apr 15 2022

jul 14 2023 selected papers on design of algorithms csli lect is available in our digital library an online access to it is set as public so you can get it instantly our digital library hosts in

the pearson general knowledge manual 2013 amazon in - Aug 02 2022

web the pearson general knowledge manual 2013 by thorpe edgar from flipkart com only genuine products 30 day

replacement guarantee free shipping cash on delivery

the pearson general knowledge manual 2013 goodreads - Feb 08 2023

web the pearson general knowledge manual 2015 edgar thorpe this book has been a best seller for more than a decade currently in its 13th edition it is thoroughly updated and

buy pearson general knowledge manual 2021 amazon in - Dec 26 2021

web pearson is proud to present the 21st edition of its best selling title general knowledge manual 2022 the book is specifically designed to help civil services aspirants to master

pearson general knowledge manual 2013 by jumiya67yahya issuu - Sep 03 2022

web the pearson concise general knowledge manual 2018 currently in its 16th edition continues to be a one stop solution for aspirants preparing for various competitive

pearson general knowledge manual 2021 amazon in - Apr 29 2022

web pearson concise general knowledge manual 2019 author edgar thorpe showick thorpe language english isbn 9789353064808 9789353066062 year 2019 file

pearson general knowledge manual 2013 by - Jan 07 2023

web pearson general knowledge manual 2013 pdf cdex manual espa ol user manual for 2002 olds alera 96 328i repair manual dmc ts5 manual firebelly fb1 instruction

the pearson general knowledge manual 2011 google books - Jun 12 2023

web the pearson general knowledge manual 2011 is an updated and revised edition of one of the most popular general knowledge manuals it is up to date comprehensive and all

the pearson general knowledge manual 2010 new edition - Mar 09 2023

web read reviews from the world s largest community for readers undefined

books by edgar thorpe author of test of reasoning goodreads - Mar 29 2022

web feb 3 2020 buy pearson general knowledge manual 2021 for upsc state civil services bank po sbi ssc other competitive exams read kindle store reviews

buy general knowledge manual 2023 includes union budget - Oct 24 2021

the pearson general knowledge manual 2013 english flipkart - May 31 2022

web the pearson concise general knowledge manual 2018 by edgar thorpe showick thorpe 4 33 avg rating 3 ratings the pearson concise general knowledge

pearson general knowledge manual 2013 - Aug 14 2023

web pearson general knowledge manual 2013 principles of taxation fa 2012 feb 18 2021 pearson concise general knowledge manual 2013 feb 13 2023 business and

the pearson general knowledge manual 2017 google books - Oct 04 2022

web the pearson general knowledge manual 2013 edgar thorpe showick thorpe amazon in books skip to main content in hello select your address electronics select

pearson general knowledge manual 2021 for upsc state - Jan 27 2022

web leading learning company pearson announces general knowledge manual 2016 by showick thorpe and edgar thorpe the book is thoroughly updated and revised with

the pearson general knowledge manual 2011 google books - Apr 10 2023

web the pearson general knowledge manual 2010 new edition author thorpe publisher pearson education india 2010 isbn 8131727904 9788131727904 length 800 pages

pearson general knowledge manual 2013 - Dec 06 2022

web the pearson general knowledge manual 2017 edgar thorpe showick thorpe pearson india 2016 1048 pages 1 review reviews aren t verified but google checks for and

pearson general knowledge manual 2013 pdf yunqian info - Nov 05 2022

web oct 7 2017 read pearson general knowledge manual 2013 by jumiya67yahya on issuu and browse thousands of other publications on our platform start here

book the pearson general knowledge manual 2018 by edgar - Sep 22 2021

the pearson concise general knowledge manual 2018 - Jul 01 2022

web by thorpe thorpe author format kindle edition 4 3 474 ratings see all formats and editions general knowledge manual 2021 is a go to resource for the aspirants of

pearson concise general knowledge manual 2019 pdf - Feb 25 2022

web mar 10 2020 amazon in buy pearson general knowledge manual 2021 for upsc state civil services bank po sbi ssc other competetive exams book online at best

general knowledge manual by pearson youtube - Nov 24 2021

web general knowledge manual 2021 is a go to resource for the aspirants of various competitive examinations including upsc state civil services bank po sbi ssc

pearson general knowledge manual 2023 pdf - May 11 2023

web the pearson general knowledge manual 2011 thorpe edgar pearson education india 2011 808 pages 6 reviews reviews

aren't verified but google checks for and

the pearson general knowledge manual 2012 google books - Jul 13 2023

web the pearson general knowledge manual 2012 edgar thorpe pearson education india 2012 10 reviews reviews aren't verified but google checks for and removes fake

fetal pig dissection carolina biological supply - Apr 04 2022

web teats determine the pig's gender a female will have a urogenital opening and labia these structures come together beneath the anus to form a small projection called the genital papilla a male pig will possess a urogenital opening for

teacher's guide for fetal pig dissection the biology corner - Oct 10 2022

web 1 do you have space with a sink pigs are a lot more involved than frogs and the preservatives will need to be drained and pigs rinsed this is not a good dissection for classrooms that do not have sinks 2 have your students completed the frog dissection

fetal pig dissection lab biology ii laboratory manual lumen - Feb 14 2023

web question is the trachea in front of or behind the esophagus cut into the thoracic cavity beneath the rib cage make sure you can locate the following structures heart lungs bronchi

reading fetal pig dissection biology ii laboratory manual - Feb 02 2022

web figure 1 female injection site nipples umbilical cord figure 2 female genital papilla urogenital opening anus figure 3 male scrotum figure 4 male urogenital opening penis anus preparation and initial cuts tie one front leg of the animal with a string that passes underneath the dissecting pan to the other leg

fetal pig dissection and fetal pig anatomy biology junction - Jun 06 2022

web pre lab before observing internal or external structures of the fetal pig use your dissection manual textbook and dissection notebook to answer the pre lab questions on the fetal pig you may have to refer to more than one dissection manual to answer all the questions so trade and share with other dissection groups

fetal pig dissection and lab guide the biology corner - Jun 18 2023

web 1 determine the sex of your pig by looking for the urogenital opening on females this opening is located near the anus on males the opening is located near the umbilical cord if your pig is female you should also note that urogenital papilla is present near the genital opening males do not have urogenital papilla

fetal pig dissection resources startsateight - Jan 13 2023

web feb 27 2017 human pig comparisons one of the main reasons to dissect a fetal pig is the similarities to the human anatomy here is a breakdown of the similarities 7 quizlet quizzes 8 free printable fetal pig dissection guide this is a full guide to dissection including labeled diagrams

fetal pig dissection lesson plan study com - Jul 07 2022

web fetal pig dissection lesson plan instructor adrienne baron adrienne has a master s degree in cancer biology and has taught high school and college biology cite this lesson fetal pigs are one

10 1 fetal pig dissection lab biology libretexts - Apr 16 2023

web identify structures on the pig and know their functions identify structures that are a part of the digestive system respiratory system circulatory system reproductive system and excretory system compare pig anatomy to human anatomy fetal pig dissection from lumen learning download a pdf of the lab to print

fetal pig dissection texas a m school of veterinary medicine - Nov 11 2022

web fetal pig dissection what do you think humans have in common with the pig ferrebeekeeper files wordpress com 2014 03 farmer clip art 4 gif clipartpanda com categories pig in mud cartoon humans and pigs may be closer than you think

teaching resources fetal pig dissection the biology corner - Sep 09 2022

web apr 10 2016 in anatomy worksheets by shannan muskopf anatomy biology diagrams dissection fetal guide instructions pig laboratory guide for the fetal pig dissection includes instructions and diagrams for students students answer questions and

fetal pig dissection manual answer booklet city university of - Mar 15 2023

web cuny queens college general biology f e t a l pig dissection answer booklet daniel j yakubov edited by dr nathalia g holtzman this work is licensed under a creative commons attribution noncommercial 4 0 international license day 1 fetal pig anatomy i external features oral cavity pharynx and digestive system

fetalpigdissectionholtbiologyanswers - Mar 03 2022

web this fetal pig dissection holt biology answers can be taken as competently as picked to act mitosis cytokinesis arthur zimmerman 2012 12 02 mitosis cytokinesis provides a comprehensive discussion of the various aspects of mitosis and cytokinesis as studied from different points of view by various authors

lab 8 11 fetal pig dissection biology libretexts - Oct 22 2023

web the size of the testes varies significantly depending on the age of the fetal pig female in the female pig locate two bean shaped ovaries located just posterior to the kidneys and connected to the curly oviducts these typically are quite small in the fetal pig trace the oviducts toward the posterior to find that they merge at the uterus

13 1 3 reading fetal pig dissection biology libretexts - May 17 2023

web obtain a fetal pig and identify the structures listed in figure 1 use figures 1 4 below to identify its sex use your pig and also a pig of the opposite sex to identify the structures in the photographs below the word urogenital refers to an opening that serves both the urinary excretory and the reproductive systems figure 1

fetal pig dissection virtual anatomy diagrams hst - Dec 12 2022

web 1 most of the pig s external features are familiar to you ears nose eyes etc on the belly you will see the umbilical cord which connected the fetal pig to its mother s placenta on either side of the umbilical cord you may see mammary papillae little nipples that will turn into teats in female pigs 2

the ultimate fetal pig dissection review the biology corner - Sep 21 2023

web are you ready for the lab practical i have completed the virtual pig dissection i have checked the the boxes on the lab guide and have found each of the organs structures listed i can spell all of the words on the lab guide i know the functions of each i have looked at each of the galleries and can identify structures on the pictures

fetal pig dissection key by biologycorner tpt - Aug 08 2022

web this is the answer key to the free worksheet available at biologycorner com worksheets fetal pig dissection html the dissection guide was revised june 2019 and some of the questions have been shuffled and new ones added

12 1 1 fetal pig dissection lab biology libretexts - Jan 01 2022

web learn about the anatomy of the pig as an example of a vertebrate mammal identify structures on the pig and know their functions identify structures that are a part of the digestive system respiratory system circulatory system reproductive system and excretory system compare pig anatomy to human anatomy

fetal pig dissection biology libretexts - Aug 20 2023

web fetal pig dissection of the lower arteries trace the abdominal aorta also called the dorsal aorta to the lower part of the body careful tweezing of the tissue will reveal several places where it branches though some of the arteries may have been cut when you removed organs of the digestive system

solved X biology 9 name part 2 fetal pig dissection - May 05 2022

web X biology 9 name part 2 fetal pig dissection label the following diagram this problem has been solved you ll get a detailed solution from a subject matter expert that helps you learn core concepts

chapter 11 fetal pig dissection uh pressbooks - Jul 19 2023

web learn more main body fetal pig dissection learning objectives identify external urogenital structures of the male and female fetal pig successfully complete dissection of the fetal pig identify on your fetal pig each structure from the labeled photographs introduction several different pig dissections were used to obtain the photographs below