



**GRADE 11 MATHEMATICS  
NOVEMBER EXAMINATION PAPER 1**

**QUESTION 1**

- 1.1 Solve for  $x$ :
- 1.1.1  $x^2 + 3x - 4 = 0$  (2)
  - 1.1.2  $3x + 10x + 5 = 0$  (2)
  - 1.1.3  $x = \sqrt{17} - 2$  (2)
  - 1.1.4  $\log x + 2\log x = 10$  (2)
  - 1.1.5  $x^2 = 9$  (2)
  - 1.1.6  $2^{3x} + 4^{3x} = 32$  (2)
- 1.2 Simultaneously solve  $x$  and  $y$ :  
 $x + y = 1$  and  $3x^2 - 4xy + y^2 = 0$  (2)
- 1.3 Solve the following inequalities:
- 1.3.1  $x^2 + 3x - 4 \leq 0$  (2)
  - 1.3.2  $-6x + 5 > 4x - 12 \leq 0$  (2)
- P4**

**QUESTION 2**

- 2.1  $x = -0.5 \pm 0.5\sqrt{2}$  are the roots of a quadratic function,  $f(x)$ , of which the y-intercept is 4. Determine  $f(x)$ . (2)
- 2.2 Given  $g(x) = \frac{2x^2 + 1}{x + 1}$
- 2.2.1 For what values of  $x$  will  $g(x)$  be undefined? (2)
  - 2.2.2 Explain why  $g(x)$  will never equal zero. (Show all your calculations.) (2)
- 2.3 Solve  $x + 2\sqrt{x} - 15 = 0$ . Graphically represent your answer. (2)

- 2.4 Simplify and leave an answer with positive exponents only:

$$\frac{a^2 b^3 c^4}{a^3 b^2 c} \cdot \frac{a^4 b^5 c^2}{a^5 b^3 c^4}$$

(2)

- 2.5 Without solving the equation, determine the nature of the roots of  $4x^2 + 3x + 1$ . (2)

**P4**

**QUESTION 3**

- 3.1 The first three terms of a linear series is given as:  $1x - 2$ ,  $x + 5$ ,  $3x + 2$

- 3.1.1 Determine the value of  $x$ . (2)
- 3.1.2 Determine the numerical value of  $T_5$ . (2)

- 3.2 Given the quadratic series:  $-1(2) - 4(4) - 9(9) - 16(16) \dots$

- 3.2.1 Determine the next two terms of the series. (2)
- 3.2.2 Determine  $T_n$ , the general term of the pattern. (2)
- 3.2.3 Given that  $T_n = -4n^2 + 10n - 10$ , determine the largest possible numerical value for  $T_n$ . (2)

- 3.3 Given  $T_n = 12 - 3n$ :

- 3.3.1 Which term in the series would be equal to  $-170$ ? (2)
- 3.3.2 Determine the numerical value for the 17<sup>th</sup> term. (2)

- 3.4 James and John look at the following patterns:

Pattern 1	Pattern 2	Pattern 3

James says if he increases the pattern number by one, squares that number and then subtracts the pattern number increased by one he will get the general formula.

John says he can derive the general formula for the number of dots by taking the number of columns in each pattern and multiplying it by the number of rows.

Who is correct between James and John? Show your answer.

(2)

**P4**

**QUESTION 4**

- Given  $f(x) = \frac{2x^2 + 1}{x + 1}$  and  $g(x) = -x^2$ . The point  $A = (-1, 0)$  lies on  $g$ .

- 4.1 Determine the value of  $a$ . (2)
- 4.2 Draw a neat sketch of the two graphs on the same sets. Show all intercepts with the axes and asymptotes clearly. (2)
- 4.3 Determine the sets of intervals of  $f(x)$  that has a positive gradient. (2)

**P4**

# Grade11 Maths Paper1 Caps2014 November

**C Cleary**



**Grade11 Maths Paper1 Caps2014 November:**

## The Enigmatic Realm of **Grade11 Maths Paper1 Caps2014 November**: 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 **Grade11 Maths Paper1 Caps2014 November** a literary masterpiece penned by way of a renowned author, readers embark on 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/book/uploaded-files/index.jsp/memo\\_grade\\_1november\\_physical\\_sciences\\_p2\\_2014\\_ec.pdf](https://staging.conocer.cide.edu/book/uploaded-files/index.jsp/memo_grade_1november_physical_sciences_p2_2014_ec.pdf)

### **Table of Contents Grade11 Maths Paper1 Caps2014 November**

1. Understanding the eBook Grade11 Maths Paper1 Caps2014 November
  - The Rise of Digital Reading Grade11 Maths Paper1 Caps2014 November
  - Advantages of eBooks Over Traditional Books
2. Identifying Grade11 Maths Paper1 Caps2014 November
  - 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 Grade11 Maths Paper1 Caps2014 November
  - User-Friendly Interface
4. Exploring eBook Recommendations from Grade11 Maths Paper1 Caps2014 November
  - Personalized Recommendations
  - Grade11 Maths Paper1 Caps2014 November User Reviews and Ratings
  - Grade11 Maths Paper1 Caps2014 November and Bestseller Lists

5. Accessing Grade11 Maths Paper1 Caps2014 November Free and Paid eBooks
  - Grade11 Maths Paper1 Caps2014 November Public Domain eBooks
  - Grade11 Maths Paper1 Caps2014 November eBook Subscription Services
  - Grade11 Maths Paper1 Caps2014 November Budget-Friendly Options
6. Navigating Grade11 Maths Paper1 Caps2014 November eBook Formats
  - ePub, PDF, MOBI, and More
  - Grade11 Maths Paper1 Caps2014 November Compatibility with Devices
  - Grade11 Maths Paper1 Caps2014 November Enhanced eBook Features
7. Enhancing Your Reading Experience
  - Adjustable Fonts and Text Sizes of Grade11 Maths Paper1 Caps2014 November
  - Highlighting and Note-Taking Grade11 Maths Paper1 Caps2014 November
  - Interactive Elements Grade11 Maths Paper1 Caps2014 November
8. Staying Engaged with Grade11 Maths Paper1 Caps2014 November
  - Joining Online Reading Communities
  - Participating in Virtual Book Clubs
  - Following Authors and Publishers Grade11 Maths Paper1 Caps2014 November
9. Balancing eBooks and Physical Books Grade11 Maths Paper1 Caps2014 November
  - Benefits of a Digital Library
  - Creating a Diverse Reading Collection Grade11 Maths Paper1 Caps2014 November
10. Overcoming Reading Challenges
  - Dealing with Digital Eye Strain
  - Minimizing Distractions
  - Managing Screen Time
11. Cultivating a Reading Routine Grade11 Maths Paper1 Caps2014 November
  - Setting Reading Goals Grade11 Maths Paper1 Caps2014 November
  - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Grade11 Maths Paper1 Caps2014 November
  - Fact-Checking eBook Content of Grade11 Maths Paper1 Caps2014 November
  - 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

### **Grade11 Maths Paper1 Caps2014 November Introduction**

In the digital age, access to information has become easier than ever before. The ability to download Grade11 Maths Paper1 Caps2014 November has revolutionized the way we consume written content. Whether you are a student looking for course material, an avid reader searching for your next favorite book, or a professional seeking research papers, the option to download Grade11 Maths Paper1 Caps2014 November has opened up a world of possibilities. Downloading Grade11 Maths Paper1 Caps2014 November provides numerous advantages over physical copies of books and documents. Firstly, it is incredibly convenient. Gone are the days of carrying around heavy textbooks or bulky folders filled with papers. With the click of a button, you can gain immediate access to valuable resources on any device. This convenience allows for efficient studying, researching, and reading on the go. Moreover, the cost-effective nature of downloading Grade11 Maths Paper1 Caps2014 November has democratized knowledge. Traditional books and academic journals can be expensive, making it difficult for individuals with limited financial resources to access information. By offering free PDF downloads, publishers and authors are enabling a wider audience to benefit from their work. This inclusivity promotes equal opportunities for learning and personal growth. There are numerous websites and platforms where individuals can download Grade11 Maths Paper1 Caps2014 November. These websites range from academic databases offering research papers and journals to online libraries with an expansive collection of books from various genres. Many authors and publishers also upload their work to specific websites, granting readers access to their content without any charge. These platforms not only provide access to existing literature but also serve as an excellent platform for undiscovered authors to share their work with the world. However, it is essential to be cautious while downloading Grade11 Maths Paper1 Caps2014 November. Some websites may offer pirated or illegally obtained copies of copyrighted material. Engaging in such activities not only violates copyright laws but also undermines the efforts of authors, publishers, and researchers. To ensure ethical downloading, it is advisable to utilize reputable websites that prioritize the legal distribution of content. When downloading Grade11 Maths Paper1 Caps2014 November, users should also consider the potential security risks associated with online platforms. Malicious actors may exploit vulnerabilities in unprotected websites to distribute malware or steal personal information. To protect themselves, individuals should ensure their devices have reliable antivirus software installed and validate the legitimacy of

the websites they are downloading from. In conclusion, the ability to download Grade11 Maths Paper1 Caps2014 November has transformed the way we access information. With the convenience, cost-effectiveness, and accessibility it offers, free PDF downloads have become a popular choice for students, researchers, and book lovers worldwide. However, it is crucial to engage in ethical downloading practices and prioritize personal security when utilizing online platforms. By doing so, individuals can make the most of the vast array of free PDF resources available and embark on a journey of continuous learning and intellectual growth.

### **FAQs About Grade11 Maths Paper1 Caps2014 November 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. Grade11 Maths Paper1 Caps2014 November is one of the best book in our library for free trial. We provide copy of Grade11 Maths Paper1 Caps2014 November in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Grade11 Maths Paper1 Caps2014 November. Where to download Grade11 Maths Paper1 Caps2014 November online for free? Are you looking for Grade11 Maths Paper1 Caps2014 November PDF? This is definitely going to save you time and cash in something you should think about.

### **Find Grade11 Maths Paper1 Caps2014 November :**

**memo grade 1november physical sciences p2 2014 ec**

~~memo-maths paper1-2014 march~~

**membrane structure and function packet pogil**

[meme bookenglish edition](#)

[memorandum geography 2014 and grade 10](#)  
[memo 2014 23 september 2014 geography paper1](#)  
[memo for gr12 maths paper west sedibeng 2014](#)  
[memorandum for 2013 june exam grade12 mathematics](#)  
[memorandum for limpopo mathematics paper2 september](#)  
[memo for business studies for 2014](#)  
[memorandum of history p1 caps november 2013](#)  
**memorandum for preparatory exam of 2014**  
[memes awesome memes and funny pictures english edition](#)  
[memorandum for limpopo mathematics paper september 23](#)  
[memorandum for tourism grade 1 pat 2014](#)

### **Grade11 Maths Paper1 Caps2014 November :**

[undertaking letter format 3 samples example email template](#) - Oct 06 2023  
web undertaking letter format an undertaking letter is a formal letter in which an individual or organization pledges to take responsibility for a particular task or obligation the letter serves as a legal agreement between two parties and outlines the specific terms and conditions of the agreement  
[undertaking letter format samples and how to write an undertaking](#) - Sep 05 2023  
web mar 15 2023 answer the following are the guidelines for writing an undertaking letter include the exact terms of conditions and any other relevant information ensure that the letter is drafted in a formal tone the matter must be unambiguous and short ensure that the letter is signed in good faith proofread the letter before sending it in question 3  
**how to write undertaking letter letters easy** - Jun 02 2023  
web your name your address city state zip code date recipient s name company name address city state zip code dear recipient s name i your name am writing this letter to provide you with an undertaking in  
[sample undertaking letter for worker documentshub com](#) - May 01 2023  
web mar 29 2018 sample undertaking letter for worker undertaking letter format by employee warning letters are part and parcel of almost every working organization they are served to keep the faculty on track and remind them of their job duties and entitlements  
**undertaking letter format by employee documents hub** - Jul 03 2023  
web aug 10 2015 sample undertaking letter format by employee teacher on serving the organization after completing free

diploma course hi tech training from office or school this type of format application is being used by offices multinational companies banks call centers and beverage companies schools colleges academies and universities

**undertaking from employee formatsplanet** - Aug 04 2023

web feb 6 2016 undertaking i mr ms son daughter of sh resident of pin and presently working as designation in department at location in company corporate office address

*4 ways to write a letter of undertaking wikihow* - Mar 31 2023

web mar 24 2023 method 1 including important information download article 1 cover any dates and monetary agreements you came to with the other party for example if you are going to be hired at a rate of 23 hour for 40 hours week starting 15 august 2019 for 6 weeks clearly state those terms

**what makes a bird a bird animal classes english e thomas** - Sep 08 2022

what makes a bird a bird animal classes english e what makes a bird a bird animal classes english e 1 downloaded from nysm pfi org on 2021 01 28 by guest for everyone interested in learning more about birds from casual bird watchers to formal students of ornithology wherever you study birds your enjoyment will be enhanced by a better

**what makes a bird a bird animal classes english edition** - Apr 03 2022

what makes a bird a bird animal classes english edition ebook cann andi amazon com br livros

structure and functions of birds britannica - Dec 11 2022

bird any of the warm blooded beaked vertebrates of the class aves including more than 9 600 living species

what makes a bird a bird animal classes kindle edition - Nov 10 2022

this book introduces children to a variety of birds and offers a rhyme to define the criteria for their animal class this book is a bedtime story that appeals to everyone in the world who loves birds and science

**what are birds bbc bitesize** - Feb 13 2023

video transcript did you know that birds are evolved from dinosaurs all birds lay eggs and they can look very different they all have beaks feathers two legs and two wings most even have

**what makes a bird a bird animal classifications youtube** - Sep 20 2023

jul 8 2020 intro what makes a bird a bird animal classifications edzoocating 493 subscribers subscribe 181 views 3 years ago animal classification these videos are part of the

is a bird an animal are birds animals find out here active - Aug 07 2022

feb 4 2016 animal classes this bird a hummingbird is an animal organisms within the animal kingdom are categorised into many other smaller groups birds are in a group called aves a big group of animals like aves is known as a class animals in the class aves are warm blooded have feathers and beaks and lay eggs

**bird wikipedia** - Jun 17 2023

birds are a group of warm blooded vertebrates constituting the class aveseri: characterised by feathers toothless beaked jaws the laying of hard shelled eggs a high metabolic rate a four chambered heart and a strong yet lightweight skeleton

**introductory lesson what makes a bird a bird** - May 16 2023

basic statements 1 birds are the only living animals that have feathers 2 all birds fly 3 all birds have two wings 4 birds lose and replace their worn or damaged feathers 5 all birds have thick heavy bones that provide the structure they need to fly 6 birds have poor eyesight 7 birds have heartbeats that are slower than humans 8

*what makes a bird a bird animal classes english edition* - Jun 05 2022

what makes a bird a bird animal classes english edition ebook cann andi amazon de kindle shop

**what makes a bird a bird animal classes english e 2023** - Jan 12 2023

what makes a bird a bird animal classes english e living as a bird may 25 2022 in the first days of spring birds undergo a spectacular metamorphosis after a long winter of migration and peaceful coexistence they suddenly begin to sing with all their might varying each series of notes as if it were an audiophonic novel

what makes a bird a bird avian report - Aug 19 2023

what is a bird birds are vertebrates with feathers they have distinctive bills are endothermic produce large eggs have elaborate parental behavior and have extraordinary vocal abilities the anatomy and physiology of most birds are adapted for flight birds share with reptiles many anatomical features that distinguish them from mammals

**what makes a bird a bird animal classes english e pdf 2023** - Feb 01 2022

what makes a bird a bird animal classes english e web what makes a bird a bird animal classes english e 3 3 includes a profiled size scale that allows the reader to quickly identify the correct bird and each bird entry is accompanied by a stunning

what makes a bird a bird animal classes english edition by web what makes a bird a bird animal

*bird description species classification types facts* - Jul 18 2023

oct 10 2023 bird any of the more than 10 400 living species unique in having feathers the major characteristic that distinguishes them from other animals they are warm blooded vertebrates more related to reptiles than mammals learn more about birds in this article

**what makes a bird a bird animal classes english edition** - Mar 02 2022

what makes a bird a bird animal classes english edition ebook cann andi amazon it kindle store passa al contenuto principale it ciao scegli il tuo indirizzo kindle store seleziona la categoria in cui desideri effettuare la ricerca ricerca amazon it ciao accedi

*what are birds defining characteristics the spruce* - Mar 14 2023

dec 17 2020 what makes a bird a bird all birds are classified as members of the kingdom animalia phylum chordata and class aves while this may seem to be an arbitrary artificial classification this general grouping emphasizes that birds are related through many of the characteristics they share

*learn school programs centennial parklands* - May 04 2022

birds are awesome and it s not just steve saying that scientists think birds are so cool they have put them in their own special group but what is it that makes birds so different from other animals what makes a bird a bird all living things are classified into groups based on their physical characteristics

what makes a bird a bird illinois department of natural - Oct 09 2022

characteristics by which birds are defined teacher s guide unit 1 lesson 1 what makes a bird a bird background there are more than 9 000 species of birds in the world with about 800 found in north america more than 400 species have been recorded in illinois and more than 200 bird species have been recorded as nesting in the state

**what makes a bird a bird georgia audubon** - Apr 15 2023

what makes a bird a bird learning about birds curriculum series background birds are separated from other vertebrate animals phylum chordata at the class taxonomic level class aves feathers make birds unique however all of these traits combined make a bird a bird feathers fused hollow bones

**teaching unit** - Jul 06 2022

lesson one introduction to birds activities 1 what makes a bird a bird prompted group discussion 2 try being a bird gross motor and sensory skills role play 3 get to know a bird collect information complete a worksheet present to class lesson two birds in the school yard activities 1 what do birds need prompted discussion 2

**turcs en allemagne problèmes et perspectives cairn info** - Jan 31 2023

web du coup c est aussi la formation sociale des turcs d allemagne qui a changé plus de la moitié des quelque 2 4 millions de turcs vivant en allemagne y sont depuis plus de

**allemagne ba c na c lux autriche ra c publique tc pdf** - Mar 01 2023

web tudes conomiques de l ocde autriche 2021 version abrge nov 04 2021 l autriche devrait surmonter le choc provoqu par le covid 19 et ses squelles conomiques grce des

allemagne ba c na c lux autriche ra c publique tc pdf - May 03 2023

web may 6 2023 allemagne ba c na c lux autriche ra c publique tc 2 6 downloaded from uniport edu ng on may 6 2023 by guest answers these questions and more drawing on

*allemagne ba c na c lux autriche ra c publique tc* - Oct 28 2022

web allemagne ba c na c lux autriche ra c publique tc 1 lux autriche ra c publique tc allemagne ba c na c lux autriche ra c

publique tc downloaded from

**allemagne ba c na c lux autriche ra c publique tc download** - Aug 26 2022

web allemagne ba c na c lux autriche ra c publique tc the standard pronouncing dictionary of the french and english languages according to the french academy etc

**allemagne ba c na c lux autriche ra c publique tc copy** - Jul 05 2023

web allemagne ba c na c lux autriche ra c publique tc is simple in our digital library an online right of entry to it is set as public appropriately you can download it instantly our

**allemagne ba c na c lux autriche ra c publique tc erkan** - Aug 06 2023

web allemagne ba c na c lux autriche ra c publique tc getting the books allemagne ba c na c lux autriche ra c publique tc now is not type of inspiring means you could

turcs d allemagne wikipedia - Dec 18 2021

web les turcs d allemagne sont les immigrants et leurs descendants venus de turquie à partir des années 1960 le 30 octobre 1961 en plein miracle économique

*allemagne ba c na c lux autriche ra c publique tc food and* - May 23 2022

web allemagne ba c na c lux autriche ra c publique tc is available in our digital library an online access to it is set as public so you can download it instantly our digital library

**l allemagne et ses turcs le monde diplomatique** - Jan 19 2022

web sep 1 2008 mais les relations entre les deux pays se sont aussi renforcées depuis les années 1950 sur le terrain économique l allemagne est le premier exportateur en

**allemagne ba c na c lux autriche ra c publique tc** - Jul 25 2022

web 2 allemagne ba c na c lux autriche ra c publique tc 2023 02 26 of middle class professional associations and their members doctors lawyers merchants and artisans

*allemagne ba c na c lux autriche ra c publique tc raffaele* - Apr 02 2023

web success neighboring to the notice as capably as perspicacity of this allemagne ba c na c lux autriche ra c publique tc can be taken as skillfully as picked to act the history

allemagne ba c na c lux autriche ra c publique tc pdf irbrora - Apr 21 2022

web mar 20 2023 allemagne ba c na c lux autriche ra c publique tc pdf when people should go to the books stores search commencement by shop shelf by shelf it is in

*allemagne ba c na c lux autriche ra c publique tc pdf* - Oct 08 2023

web allemagne ba c na c lux autriche ra c publique tc standard poor s international creditweek mar 03 2022 archives of

industrial hygiene toxicology sep 16 2020

**allemagne ba c na c lux autriche ra c publique tc copy** - Sep 07 2023

web allemagne ba c na c lux autriche ra c publique tc 1 omb no allemagne ba c na c lux autriche ra c publique tc learn  
german alphabet with pronunciation

*allemagne bénélux autriche république tchèque 1 1 000 000 by* - Mar 21 2022

web sep 26 2023 allemagne bénélux autriche république tchèque 1 1 000 000 by michelin train travel around france and  
europe by oui sncf iban calculator threadneedle

**allemagne ba c na c lux autriche ra c publique tc copy** - Jun 23 2022

web jan 22 2023 allemagne ba c na c lux autriche ra c publique tc 1 7 downloaded from kelliemay com on january 22 2023  
by guest allemagne ba c na c lux autriche

*allemagne ba c na c lux autriche ra c publique tc* - Jun 04 2023

web allemagne ba c na c lux autriche ra c publique tc 1 allemagne ba c na c lux autriche ra c publique tc nouveau  
dictionnaire allemand françois et françois

*allemagne ba c na c lux autriche ra c publique tc wrbb neu* - Sep 26 2022

web allemagne ba c na c lux autriche ra c publique tc 3 3 carte de carte routia re allemagne ba c na c lux autriche pdf 2022  
allemagne ba c na c lux autriche ra c

**mercedes classe c occasion en allemagne caroom** - Nov 16 2021

web mercedes classe c occasion en allemagne toutes les offres d occasion de classe c importées d allemagne ou déjà en  
france de 20 450 à 124 950 vous pouvez aussi

*allemagne ba c na c lux autriche ra c publique tc* - Feb 17 2022

web pages of allemagne ba c na c lux autriche ra c publique tc a mesmerizing literary creation penned with a celebrated  
wordsmith readers embark on an enlightening

**artec europe sàrl industrie luxembourg editus** - Dec 30 2022

web artec europe sàrl industrie 20 rue des peupliers l 2328 luxembourg lëtzebuerg fax 352 26 00 86 43 nummer anzeigen

**allemagne bénélux autriche république tchèque 1 1 000 000 by** - Nov 28 2022

web sep 17 2023 allemagne bénélux autriche république tchèque 1 1 000 000 by michelin country codes country codes csv  
at master datasets relais pompe chaleur pac clair o