

IGCSE MATHS

0580/22

PAPER 2

October November-22

Full Solution

Cambridge IGCSE™

Centre Number:
Candidate Number:

MATHEMATICS 0580/22
Paper 2 (Extended) **50 MARKS**
50 minutes
1 hour 15 minutes

Solved

- INSTRUCTIONS**
- Answer all questions.
 - Use a ruler to mark lines only. Do not use an eraser for any drawings or graphs.
 - Write your name, centre number and candidate number in the boxes at the top of the page.
 - Write your answers in your candidate's language provided.
 - Do not use an erasable pen or correction fluid.
 - Do not write on any bar codes.
 - You should use a calculator where appropriate.

1. The diagram shows the number of people in a boat against time.

(a) Describe the boat's motion over the 10 minutes. **4 marks**

(b) Explain why the boat could not be a motor boat. **1 mark**

2. The diagram shows three triangles.

(a) Show that the triangles are similar. **2 marks**

(b) Find a value for x . **1 mark**

(c) Find a value for y . **1 mark**

3. The table shows some information.

Year	Number of people	Area
2010	100	1000
2011	120	1200
2012	150	1500

4. The diagram shows a circle with centre O .

(a) Find the size of angle AOC . **2 marks**

(b) Find the size of angle BOE . **1 mark**

5. The diagram shows a circle with centre O .

Maths Paper Oct Nov 2013 9712

Brendan G. Carr



Maths Paper Oct Nov 2013 9712:

Students' and Teachers' Values, Attitudes, Feelings and Beliefs in Mathematics Classrooms Hanna Palmér, Jeppe Skott, 2017-12-04 This contributed volume is an exciting product of the 22nd MAVI conference which presents cutting edge research on affective issues in teaching and learning math The teaching and learning of mathematics is highly dependent on students and teachers values attitudes feelings beliefs and motivations towards mathematics and mathematics education These peer reviewed contributions provide critical insights through their theoretically and methodologically diverse analyses of relevant issues related to affective factors in teaching and learning math and offer new tools and strategies by which to evaluate affective factors in students and teachers mathematical activities in the classroom Among the topics discussed The relationship between proxies for learning and mathematically related beliefs Teaching for entrepreneurial and mathematical competences Prospective teachers conceptions of the concepts mean median and mode Prospective teachers approach to reasoning and proof The impact of assessment on students experiences of mathematics Through its thematic connections to teacher education professional development assessment entrepreneurial competences and reasoning and proof Students and Teachers Values Attitudes Feelings and Beliefs in Mathematics Classrooms proves to be a valuable resource for educators practitioners and students for applications at primary secondary and university levels

Making School Maths Engaging Anne Prescott, Mary Coupland, Marco Angelini, Sandra Schuck, 2020-10-19 This book provides an account of a large scale national STEM initiative in Australia the Maths Inside Project which is designed to increase secondary school students engagement and participation in mathematics The project s modules include videos illustrating how scientists use mathematics to find solutions to real world problems as well as themed activities linked to the school curriculum for mathematics Outlining the current debates concerning mathematics education in Australia and beyond the book describes the development and implementation of the modules to guide their use by teachers in year 8 12 Australian mathematics classrooms It concludes with a discussion of the research showing how the project increased student engagement The book discusses the partners involved in the project including scientists a national mathematics teachers association and the authors university It also offers insights into how to embark on pedagogical improvement through collaboration between individual institutional stakeholders Providing details of the modules to enable teachers and teacher educators to help their students better understand and utilise the curriculum resources of Maths Inside the book is a useful resource for educators around the globe wanting to make mathematics engaging topical and relevant for secondary school students

Raising the Impact of Education Research in Africa Charl C. Wolhuter, 2018-12-01 The low demonstrable effect of education research done in South Africa in particular and Africa in general continues to be a problem in scientific records in the educational sciences This scholarly collected work addresses this obstacle and focuses on recommendations from scholars in different sectorial categories in the field of education Scholars from a variety of sub fields within the educational sciences reflect on

this particular matter revisiting the history of research and research outcomes and offering informed recommendations based on in depth investigation and analysis of aspects of the various discourses within the relevant sub fields The scope of the content of this collected work centres on the issue of the lack of scientific records concerning the scientific raising of the impact of education research The book aims at making a specific contribution to the educational sciences by stimulating scholarly discussion around how to increase the recording of the significance of educational research done in Africa and in South Africa in particular and to redirect the research agenda into the direction of making more impact Impact is conceptualised to mean both scholarly impact that is being cited and being used as foundation for theory building and for further research and practical impact that is improvement of practice teaching and learning in education institutions at all levels

Who's Who in the Midwest Marquis Who's Who, Marquis Who's Who Staff, 1998 Profiles the most influential men and women from America's heartland Contains over 16 000 biographies of people working in Illinois Indiana Iowa Kansas Michigan Minnesota Missouri Nebraska North Dakota Ohio South Dakota and Wisconsin in the United States and from Manitoba and western Ontario in Canada

The Top Books of the Year Maths Paper Oct Nov 2013 9712 The year 2023 has witnessed a noteworthy surge in literary brilliance, with numerous compelling novels captivating the hearts of readers worldwide. Lets delve into the realm of bestselling books, exploring the captivating narratives that have captivated audiences this year. The Must-Read : Colleen Hoover "It Ends with Us" This touching tale of love, loss, and resilience has captivated readers with its raw and emotional exploration of domestic abuse. Hoover skillfully weaves a story of hope and healing, reminding us that even in the darkest of times, the human spirit can prevail. Maths Paper Oct Nov 2013 9712 : Taylor Jenkins Reids "The Seven Husbands of Evelyn Hugo" This captivating historical fiction novel unravels the life of Evelyn Hugo, a Hollywood icon who defies expectations and societal norms to pursue her dreams. Reids captivating storytelling and compelling characters transport readers to a bygone era, immersing them in a world of glamour, ambition, and self-discovery. Maths Paper Oct Nov 2013 9712 : Delia Owens "Where the Crawdads Sing" This evocative coming-of-age story follows Kya Clark, a young woman who grows up alone in the marshes of North Carolina. Owens spins a tale of resilience, survival, and the transformative power of nature, captivating readers with its evocative prose and mesmerizing setting. These bestselling novels represent just a fraction of the literary treasures that have emerged in 2023. Whether you seek tales of romance, adventure, or personal growth, the world of literature offers an abundance of compelling stories waiting to be discovered. The novel begins with Richard Papen, a bright but troubled young man, arriving at Hampden College. Richard is immediately drawn to the group of students who call themselves the Classics Club. The club is led by Henry Winter, a brilliant and charismatic young man. Henry is obsessed with Greek mythology and philosophy, and he quickly draws Richard into his world. The other members of the Classics Club are equally as fascinating. Bunny Corcoran is a wealthy and spoiled young man who is always looking for a good time. Charles Tavis is a quiet and reserved young man who is deeply in love with Henry. Camilla Macaulay is a beautiful and intelligent young woman who is drawn to the power and danger of the Classics Club. The students are all deeply in love with Morrow, and they are willing to do anything to please him. Morrow is a complex and mysterious figure, and he seems to be manipulating the students for his own purposes. As the students become more involved with Morrow, they begin to commit increasingly dangerous acts. The Secret History is a exceptional and suspenseful novel that will keep you guessing until the very end. The novel is a warning tale about the dangers of obsession and the power of evil.

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web use crayons or colored pencils to color in the spectrum in the box on your report sheet to show the correlation between

color and wavelength part ii flame tests you will conduct flame tests to observe the flame emission colors for the following

solutions lino3 cu no3 2 sr no3 2 ba no3 2 kno3 and nano3 since nitrates do not emit color you

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a small amount of a solution of a metal ion is placed in the flame of a bunsen burner the flame turns a

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spectra from red fireworks to a substance in your material list then make your final determination of what ion in the material

list causes red fireworks procedure

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web energy and matter answered worksheet the experiment conducted aimed to give students the opportunity to determine

different metal ions in liquid and solid compounds by observing the color of the flames they give off when

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web sep 22 2021 pre laboratory assignment flame tests of metal cations in this lab you will perform flame tests of several different metal cations the characteristic colors observed are due to emitted electromagnetic radiation from the excited metal cations in this lab how do the metal cations become excited

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web feb 10 2021 section 1 purpose and summary observe the color of light emitted when a sample of a salt of a metal cation is heated use the characteristic color of flames to identify ions in various laboratory samples observe the emission spectra of various elements in gas discharge tubes

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