

## GRADE 9 MATHEMATICS NOVEMBER EXAMINATION PAPER 2

### QUESTION 1

1.1 Draw a rhombus and indicate all properties in mathematical language. (5)

1.2 Choose the correct answer and write only the LETTER on your answer sheet.

1.2.1 Which of the following statements is NOT true about a kite?

- A The longer diagonal bisects the shorter diagonal at  $90^\circ$
- B The shorter diagonal bisects the longer diagonal at  $90^\circ$
- C Diagonals bisect each other
- D Diagonals are equal

1.2.2 An isosceles triangle has a top angle of  $70^\circ$ . The individual value of the equal angles will be:

- A  $60^\circ$
- B  $55^\circ$
- C  $70^\circ$
- D  $65^\circ$

1.2.3 A translation is:

- A Any horizontal or vertical change in position of a shape.
- B A mirror-image of the original position.
- C An enlargement of the original shape.
- D A reduction of the original shape.

1.2.4 What is the length of  $AC$  in the figure below?



- A 26cm
- B 15cm
- C 13cm
- D 5cm

1.2.5 A point on a shape has coordinates  $(-2, 2)$ , what would the new coordinates be after a  $y' = -x$  reflection?

- A  $(3, -2)$
- B  $(2, 2)$
- C  $(-3, 2)$
- D  $(3, 2)$

### QUESTION 2: GEOMETRY

Use the following structure to answer this question:

| Statement: | Reason: |
|------------|---------|
|            |         |

2.1 In the diagram below  $ABZ = 65^\circ$  and  $DCF = 10^\circ$



2.1.1 Calculate the size of  $ZAC$ . Give reasons and show your calculations. (3)

# 2013 Maths Exam Answers For Grade 9 At Mpumalanga

**Mpumalanga (South Africa).**  
**Department of Education**

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*Annual Report Mpumalanga (South Africa). Department of*

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## **Table of Contents 2013 Maths Exam Answers For Grade 9 At Mpumalanga**

1. Understanding the eBook 2013 Maths Exam Answers For Grade 9 At Mpumalanga
  - The Rise of Digital Reading 2013 Maths Exam Answers For Grade 9 At Mpumalanga
  - Advantages of eBooks Over Traditional Books
2. Identifying 2013 Maths Exam Answers For Grade 9 At Mpumalanga
  - 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 2013 Maths Exam Answers For Grade 9 At Mpumalanga
  - User-Friendly Interface
4. Exploring eBook Recommendations from 2013 Maths Exam Answers For Grade 9 At Mpumalanga
  - Personalized Recommendations
  - 2013 Maths Exam Answers For Grade 9 At Mpumalanga User Reviews and Ratings
  - 2013 Maths Exam Answers For Grade 9 At Mpumalanga and Bestseller Lists
5. Accessing 2013 Maths Exam Answers For Grade 9 At Mpumalanga Free and Paid eBooks
  - 2013 Maths Exam Answers For Grade 9 At Mpumalanga Public Domain eBooks
  - 2013 Maths Exam Answers For Grade 9 At Mpumalanga eBook Subscription Services
  - 2013 Maths Exam Answers For Grade 9 At Mpumalanga Budget-Friendly Options
6. Navigating 2013 Maths Exam Answers For Grade 9 At Mpumalanga eBook Formats

- ePub, PDF, MOBI, and More
- 2013 Maths Exam Answers For Grade 9 At Mpumalanga Compatibility with Devices
- 2013 Maths Exam Answers For Grade 9 At Mpumalanga Enhanced eBook Features

7. Enhancing Your Reading Experience

- Adjustable Fonts and Text Sizes of 2013 Maths Exam Answers For Grade 9 At Mpumalanga
- Highlighting and Note-Taking 2013 Maths Exam Answers For Grade 9 At Mpumalanga
- Interactive Elements 2013 Maths Exam Answers For Grade 9 At Mpumalanga

8. Staying Engaged with 2013 Maths Exam Answers For Grade 9 At Mpumalanga

- Joining Online Reading Communities
- Participating in Virtual Book Clubs
- Following Authors and Publishers 2013 Maths Exam Answers For Grade 9 At Mpumalanga

9. Balancing eBooks and Physical Books 2013 Maths Exam Answers For Grade 9 At Mpumalanga

- Benefits of a Digital Library
- Creating a Diverse Reading Collection 2013 Maths Exam Answers For Grade 9 At Mpumalanga

10. Overcoming Reading Challenges

- Dealing with Digital Eye Strain
- Minimizing Distractions
- Managing Screen Time

11. Cultivating a Reading Routine 2013 Maths Exam Answers For Grade 9 At Mpumalanga

- Setting Reading Goals 2013 Maths Exam Answers For Grade 9 At Mpumalanga
- Carving Out Dedicated Reading Time

12. Sourcing Reliable Information of 2013 Maths Exam Answers For Grade 9 At Mpumalanga

- Fact-Checking eBook Content of 2013 Maths Exam Answers For Grade 9 At Mpumalanga
- 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

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