

EmpowerED

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Section A: Multiple Choice Questions

- 1. MCQ 1: What is the value of π (pi) to two decimal places?
- a) 3.12
- b) 3.14
- c) 3.16
- d) 3.18
- 2. **MCQ 2:** Solve for x: 3x 5 = 10
- a) x = 5
- b) x = 6
- c) x = 15
- d) x = 7
- 3. **MCQ 3:** What is the square root of 144?
- a) 12
- b) 16
- c) 10
- d) 14
- 4. MCQ 4: What is the value of 5! (5 factorial)?
- a) 20
- b) 60
- c) 120
- d) 24

Section B: Short Answer Questions

- 5. **Short Answer 1:** Explain the concept of slope in a linear equation and how it is calculated.
- 6. Short Answer 2: Solve the equation: 2(x + 3) = 20
- 7. **Short Answer 3:** What is the difference between a median and a mode in statistics?
- 8. **Short Answer 4:** Describe the process of solving a quadratic equation using the quadratic formula.

Section C: Long Answer Questions

9. **Long Answer 1:** Explain the concept of exponential growth and provide a real-world example.



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Grade 9 WS 3

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- 10.**Long Answer 2:** Solve the following system of equations using substitution or elimination method: 2x + y = 7x y = 3
- 11.**Long Answer 3:** Describe the properties of a rhombus and provide formulas to calculate its area and perimeter.
- 12.**Long Answer 4:** Explain the concept of probability and provide examples of how it is used in everyday life.

Section D: Competency Based Questions

- 13. Competency Based Question 1: Imagine you are planning a school event where tickets will be sold. Create a budget and pricing strategy, considering factors such as fixed costs, variable costs, and desired profit margin.
- 14. Competency Based Question 2: You are tasked with designing a garden with various geometric shapes for a landscaping project. Describe how you would calculate the area and perimeter of each shape to ensure efficient use of space and materials.

15.