

CS-585: Mathematics

Practice Exam

Generated on June 27, 2025

Difficulty: Medium

Important Notes:

- Answer all questions to the best of your ability
- Show all work for partial credit
- Use additional paper if needed
- Time limit: 90 minutes

1. A farmer has a rectangular field with a perimeter of 100 meters. If the length of the field is 5 meters more than twice its width, what are the dimensions (length and width) of the field in meters? Show your work to demonstrate how you arrived at your answer.

2. Two trains leave the same station at the same time, traveling in opposite directions. One train travels at a speed of 60 mph, and the other travels at 75 mph. How far apart will the trains be after 2.5 hours? Explain your reasoning and show your calculations.

3. A circle has an area of 36π square units. What is the circumference of the circle? Remember to show your steps and explain your method for finding the answer, including any relevant formulas.