

MAT2540, Quiz6, Spring2026

ID: _____ Name: Sol

- This quiz consists of 2 questions for a total of 10 points.
- You have 15 minutes to complete the quiz and show all work and justify your answers.
- Wishing you success.

1. a) Find a recurrence relation for the number of bit strings that contain three consecutive 0s.
b) What are the initial conditions for the recurrence relation in part (a)?

Please check HW? question 8.

2. a) Find a recurrence relation for the number of ways to completely cover a $2 \times n$ checkerboard with 1×2 dominoes. b) What are the initial conditions for the recurrence relation in part (a)?

Please check HW? question 26