

Instructions

- Answer each question completely; justify your answers.
- This assignment is due at: 3:00 pm on Monday September 29th.

1. Exercise 5.4.20.

2. Exercise 5.4.28.

3. Exercise 5.4.44.

4. Exercise 5.4.52.

5. Exercise 5.5.3, parts (a) and (c).

6. Exercise 5.5.6.

7. Exercise 5.5.15.

8. Exercise 5.5.19.

9. Exercise 5.5.25: Evaluate $\sum_{k=0}^n \frac{(2n)!}{k!(n-k)!}$.