

Chapter 11 Test Review

Know:

- How to find ${}_nP_r$ and ${}_nC_r$ both by hand and on your calculator.
- How to find expected value.

Memorize

- Fundamental Counting Principle (pg 560,561)
- Definition of n factorial: $n!=n(n-1)(n-2)\dots(3)(2)(1)$
- $0!=1$
- $\text{probability of an event} = P(E) = \frac{n(E)}{n(S)} = \frac{\text{number of outcome in the event}}{\text{number of total outcomes}}$

Information that will be provided:

- Formulas for ${}_nP_r$, ${}_nC_r$
- Formula for permutations of duplicate items (pg 570)
- $P(\text{not } E)=1-P(E)$
- Formulas for $P(A \text{ or } B)$, $P(A \text{ and } B)$, odds
- Formula for an event happening at least once (pg 607)

Extra credit review problems (10 points, due when you take the test)

- 11.1: 6,15,19,20
- 11.2: Give the definition of n!. A,2,7,14,19,35,42,47,50,51
- 11.3: B,14,21(show every detail),33,36,40
- 11.4: A,B,5,48-51,56
- 11.6: 2,3,16,19,26,28,53,59,64,66,67
- 11.7: 2,3,8,21,25,40,41,66,67,81
- 11.8: 8,9,14,18

Reminders

- Your calculator must have !, ${}_nP_r$, ${}_nC_r$. Bring your own calculator, as you may not share with another person during the test.

General Info:

- No notes. A calculator is needed on this test. You may not use your cell phone.
- You have 50 minutes to take the test.
- Please do not talk to anyone about the test who hasn't taken it yet, as there are two sections of this class.