## I. Binomial Experiment (p.212):

1. Two mutually exclusive outcomes, one referred to as a "success" (S) and the other referred to as a "failure" (F)
2. Repeats of the experiment, referred to as "trials," are independent and the probabilities remain constant
3. Probability of a success is denoted " p " and the probability of a failure is determined by " $1-\mathrm{p}$ "
II. Examples (pp.222-223): \#2,4,8,10
III. Probability Distribution Function (p.216):

Probability of " $r$ " successes in " $n$ " trials is given by...

$$
\mathrm{P}(\mathrm{r})={ }_{\mathrm{n}} \mathrm{C}_{\mathrm{r}} \cdot \mathrm{p}^{\mathrm{r}} \cdot(1-\mathrm{p})^{\mathrm{n}-\mathrm{r}}
$$

IV. Examples (pp.223-227): \#12,16,26

HW: pp.222-225 / \#1,3,7,11,13,15,19,21
Read pp.229-236 (section 5.3)

