Math 1324
Test 2 Formula Sheet

$I = \Pr t$ $\quad F = P(1+rt)$ $\quad i = \dfrac{r}{m}$ $\quad n = mt$

$P = F(1+i)^{-n}$ $\quad P = E\left[\dfrac{1-(1+i)^{-n}}{i}\right]$ $\quad E = \dfrac{Pi}{1-(1+i)^{-n}}$

$F = P(1+i)^{n}$ $\quad F = E\left[\dfrac{(1+i)^{n}-1}{i}\right]$ $\quad E = \dfrac{Fi}{(1+i)^{n}-1}$

$n(A \cup B) = n(A) + n(B)$, if $A \cap B = \varnothing$
$n(A \cup B) = n(A) + n(B) - n(A \cap B)$, if $A \cap B \neq \varnothing$

$(A \cup B)^c = A^c \cap B^c$ $\quad (A \cap B)^c = A^c \cup B^c$

$n! = n \cdot (n-1) \cdot (n-2) \cdot \ldots \cdot 3 \cdot 2 \cdot 1$

$0! = 1$

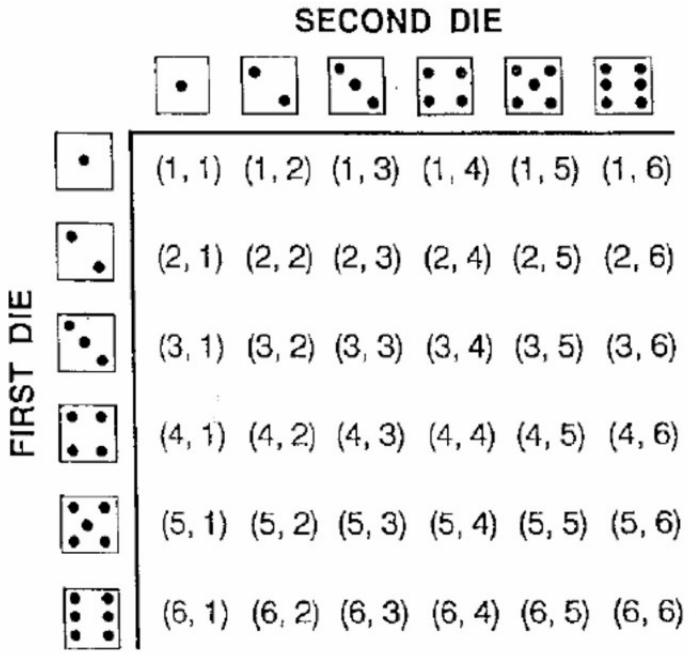
$P(n,r) = \dfrac{n!}{(n-r)!}$

$C(n,r) = \dfrac{n!}{r!(n-r)!}$

$\dfrac{n!}{n_1!\,n_2!\,\ldots\,n_r!}$

$P(E^c) = 1 - P(E)$

$P(E) = \dfrac{n(E)}{n(S)}$



$P(E \cup F) = P(E) + P(F)$, if $E \cap F = \varnothing$
$P(E \cup F) = P(E) + P(F) - P(E \cap F)$, if $E \cap F \neq \varnothing$
$P(E^c) = 1 - P(E)$