

Math 1324
Test 2 Formula Sheet

$$I = Prt \qquad F = P(1 + rt) \qquad i = \frac{r}{m} \qquad n = mt$$

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

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

$$n(A \cup B) = n(A) + n(B), \text{ if } A \cap B = \emptyset$$

$$n(A \cup B) = n(A) + n(B) - n(A \cap B), \text{ if } A \cap B \neq \emptyset$$

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

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

$$0! = 1$$

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

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

$$\frac{n!}{n_1! n_2! \dots n_r!}$$

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

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

		SECOND DIE					
							
FIRST DIE		(1, 1)	(1, 2)	(1, 3)	(1, 4)	(1, 5)	(1, 6)
		(2, 1)	(2, 2)	(2, 3)	(2, 4)	(2, 5)	(2, 6)
		(3, 1)	(3, 2)	(3, 3)	(3, 4)	(3, 5)	(3, 6)
		(4, 1)	(4, 2)	(4, 3)	(4, 4)	(4, 5)	(4, 6)
		(5, 1)	(5, 2)	(5, 3)	(5, 4)	(5, 5)	(5, 6)
		(6, 1)	(6, 2)	(6, 3)	(6, 4)	(6, 5)	(6, 6)

$$P(E \cup F) = P(E) + P(F), \text{ if } E \cap F = \emptyset$$

$$P(E \cup F) = P(E) + P(F) - P(E \cap F), \text{ if } E \cap F \neq \emptyset$$

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