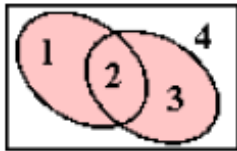
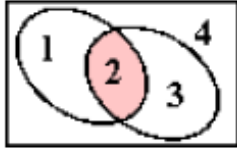
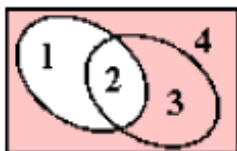
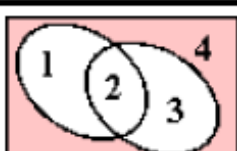
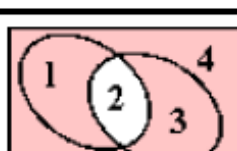


Set Notation	Pronunciation	Meaning	Venn Diagram	Answer
$A \cup B$	"A union B"	Everything in both sets		$\{1, 2, 3\}$
$A \cap B$	"A intersect B"	Only what is in common with both sets		$\{2\}$
\bar{A} or A'	"A complement"	Everything NOT in set A		$\{3, 4\}$
$(A \cup B)'$	"not A union B"	Everything NOT in set A and set B		$\{4\}$
$(A \cap B)'$	"not A intersect B"	Everything NOT in common between set A and set B		$\{1, 3, 4\}$

Sum of Rolling 2 Dice

	1	2	3	4	5	6
1	2	3	4	5	6	7
2	3	4	5	6	7	8
3	4	5	6	7	8	9
4	5	6	7	8	9	10
5	6	7	8	9	10	11
6	7	8	9	10	11	12

	Dice #1					
	1	2	3	4	5	6
1	(1,1)	(2,1)	(3,1)	(4,1)	(5,1)	(6,1)
2	(1,2)	(2,2)	(3,2)	(4,2)	(5,2)	(6,2)
3	(1,3)	(2,3)	(3,3)	(4,3)	(5,3)	(6,3)
4	(1,4)	(2,4)	(3,4)	(4,4)	(5,4)	(6,4)
5	(1,5)	(2,5)	(3,5)	(4,5)	(5,5)	(6,5)
6	(1,6)	(2,6)	(3,6)	(4,6)	(5,6)	(6,6)

Deck of Cards

• 52 total cards

• 4 Suits 

• 13 cards in each suit

A, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K

• 3 Face cards in each suit

Mutually Exclusive

• $P(A \cup B) = P(A) + P(B)$

Independent

• $P(A \cap B) = P(A) \cdot P(B)$

Overlapping

• $P(A \cup B) = P(A) + P(B) - P(A \cap B)$

Dependent

• $P(A \cap B) = P(A) \cdot P(B | A)$

Black Cards



Red Cards

