

Basic
Probability

Subset of
a set

Intersection
of sets

Odds

Complement
of a set

Union
of sets

Odds:

Example: In a deck of 52 cards, find the **odds** of...

Example: In a deck of 52 cards, find the **probability** of...

Basic Probability:

Odds(Event)= -----

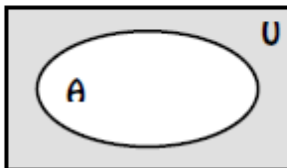
- a) Drawing a red card
- b) Drawing an ace
- c) Drawing a club

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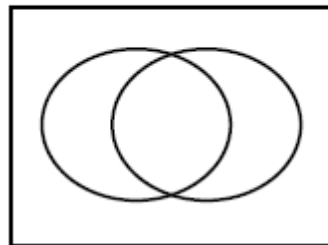
P(Event)= -----

Complement of a Set

The complement of Set A is the set of all elements in the universal set U that are not A. The notation for the complement of set A is A^c .



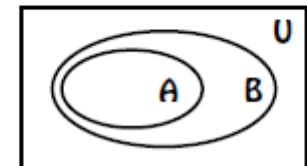
You roll an 8 sided number cube. Event A is rolling an odd number. Event B is rolling a factor of 6. Draw a Venn Diagram and calculate each of the following probabilities.



- 1) $P(A) =$
- 2) $P(B) =$
- 3) $P(A \cap B) =$
- 4) $P(A \cup B) =$
- 5) $P(A^c) =$

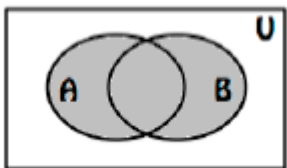
Subset of a Set

Set A is a subset of set B if every element of A is also an element of B. The notation for this situation is $A \subset B$.

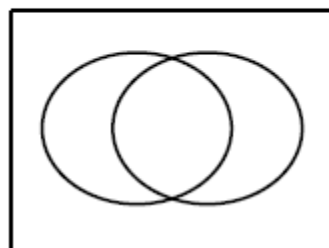


Union of Sets

The union of sets A and B is the set of all elements that are in A and B. The notation for this situation is $A \cup B$.



You have a set of 10 cards numbered 1 – 10. You choose a card at random. Event A is choosing a number less than 8. Event B is choosing an even number. Draw a Venn Diagram and calculate each of the following probabilities.



- 1) $P(A) =$
- 2) $P(B) =$
- 3) $P(A \cap B) =$
- 4) $P(A \cup B) =$
- 5) $P(A^c) =$

Intersection of Sets

The intersection of sets A and B is the set of all elements that are in both sets A and B. The notation for an intersection is $A \cap B$.

