ADDITION RULE, COMPLEMENT RULE

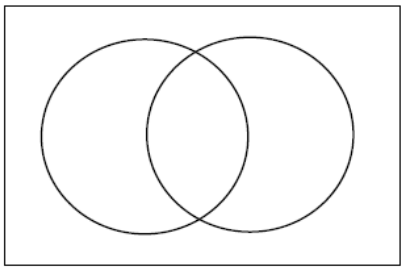
PROBABILITY RULE FOR COMPLEMENTS: $P(E^C) = 1 - P(E)$

EXAMPLE 5: Two dice are tossed. Find the probability that the outcome is NOT a double

ADDITION RULE FOR "OR" (union ∪) events:

$$P(E \cup F) = P(E) + P(F) - P(E \cap F)$$

$$P(E \text{ } OR \text{ } F) = P(E) + P(F) - P(E \text{ } AND \text{ } F)$$



EXAMPLE 6: Two dice are tossed.

Find the probability of getting a sum of 8 OR a double

Find the probability of getting a sum of 7 OR a double

Addition Rule for OR Events:	**P(E or F) = P(E) + P(F) – P(E and F)** **$P(E \cup F) = P(E) + P(F) - P(E \cap F)$**

g. Find the probability that the vehicle was new OR a van.

h. Find the probability that the vehicle was leased OR a truck.