

E1 and E2

P(E1 OR E2) = P(E1) + P(E2) – P(E1 AND E2)

For mutually exclusive events,

P(E1 OR E2) = P(E1) + P(E2)

P(E1) + P(E1)’ = 1

(E1)’ is the complement of E1 (set that contains the elements present in the universal set but not in set E)

E1’

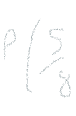
Text, letter

Description automatically generated

6/52

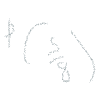
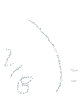
Therefore P(R OR C) = 26/52 + 12/52 – 6/52

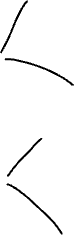












**In New York State, 48% of all teenagers own a skateboard and 39% of all teenagers own a skateboard and roller blades. What is the probability that a teenager owns roller blades given that the teenager owns a skateboard?**

A picture containing diagram

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*"The probability of****event B given event A****equals  
the probability of****event A and event B****divided by the probability of****event A***





Graphical user interface, text, application, email

Description automatically generated

