

## **Subject 16**

### **Probability**

**Please, don't write on the exam paper.**

**1)** The probability for a New York teenager to own a skateboard is 0.37, a bicycle is 0.81, and both is 0.36.

If a New York teenager is chosen at random, what is the probability that he/she owns a skateboard or a bicycle?

**2)** A jar contains 6 red balls, 3 green balls, 5 white balls, and 7 yellow balls.

Two balls are drawn successively from the jar, with replacement of the first ball drawn.

What is the probability that both balls are green?

**3)** A nationwide survey showed that 65% of all children in the United States dislike eating vegetables.

If 4 children are chosen at random, what is the probability that all 4 dislike eating vegetables?

**4)** In New York State, 48% of all teenagers own a skate board, and 39% of all teenagers have roller blades and a skate board.

What is the probability that a teenager has roller blades, given that he has also a skate board?