Benha University
Engineering Mathematics and
Physics Department
1st semester 2011-2012



Faculty of Engineering (Shoubra)
Electrical Engineering
2nd year (Communication)
Mid term exam (5 marks)

Student Name in Arabic:

Section:

B.N.

- i- Find the probability of drawing 3 aces at random from a deck of 52 ordinary cards if the cards are (a) replaced, (b) not replaced.
- .ii- Of 200 employees of a company, a total of 120 smoke cigarettes: 60% of the smokers are male and 80% of the non smokers are male. What is the probability that an employee chosen at random is male or smokes cigarettes?

Good Luck Dr. Khaled El Naggar @

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Student Name in Arabic:

Section:

B.N.

- i- When two dice are thrown simultaneously, what is the probability that the sum of the two numbers that turn up is less than 11?
- ii- Of 200 employees of a company, a total of 120 smoke cigarettes: 60% of the smokers are male and 80% of the non smokers are male. What is the probability that an employee chosen at random is female or does not smoke cigarettes?

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i- There are 9 beads in a bag. 3 beads are red, 3 beads are blue, and 3 beads are black. If two beads are chosen at random, what is the probability that they are at least one blue? ii- Of 200 employees of a company, a total of 120 smoke cigarettes: 60% of the smokers are male and 80% of the non smokers are male. What is the probability that an employee chosen at random is is male or does not smoke?

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- i- Six beads are in a bag: one blue, two red, and three green. If three beads are randomly drawn from the bag, what is the probability that they are at least one green?
- ii- Suppose there is a school with 60% boys and 40% girls as students. The female students wear trousers or skirts in equal numbers; the boys all wear trousers. An observer sees a (random) student from a distance; all the observer can see is that this student is wearing trousers. What is the probability this student is a girl?

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Section:

B.N.

- i- Seven beads are in a bag: three blue, two red, and two green. If three beads are randomly drawn from the bag, what is the probability that they are not blue?
- ii- Suppose there is a school with 60% boys and 40% girls as students. The female students wear trousers or skirts in equal numbers; the boys all wear trousers. An observer sees a (random) student from a distance; all the observer can see is that this student is wearing trousers. What is the probability this student is a boy?

Good Luck

Dr. Khaled El Naggar

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