Show All Solutions

Rosen, Discrete Mathematics and Its Applications, 6th edition
Extra Examples

Section 6.2—Probability Theory

Extra Examples — *Page references correspond to locations of Extra Examples icons in the textbook.*

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p.404, icon at Example 3

#1. You draw 2 cards, one at a time without replacement, at random from a deck of 52 cards. Find
(a) p(second card is a Jack | first card is a Jack)
(b) p(second card is red | first card is black)

See Solution

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p.405, icon at Example 5

#1. You write a string of letters of length 3 from the usual alphabet, with no repeated letters allowed. Let E_1 be the event that the string begins with a vowel and E_2 be the event that the string ends with a vowel. Determine whether E_1 and E_2 are independent.

See Solution

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p.407, icon at Example 9

#1. A fair coin is flipped five times. Find the probability of obtaining exactly four heads.

See Solution

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p.407, icon at Example 9

#2. A die is rolled six times in a row. Find

(a) p(exactly four 1's are rolled).

(b) p(no 6's are rolled).

See Solution

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p.407, icon at Example 9

#3. A quiz consists of 20 true/false questions. You need to have a score of at least 65% in order to pass the quiz. What is the probability that you pass the quiz if you guess at random at each answer?

See Solution
