## Introduction to Probability

Specific Expectations
Section
Use Venn diagrams as a tool for organizing information in counting problems.Solve problems, using techniques for counting permutations where someobjects may be alike.
Solve problems, using techniques for counting combinations.6.3
Solve probability problems involving combinations of simple events, using counting techniques. ..... 6.3, 6.4, 6.5, ..... 6.6
Interpret probability statements, including statements about odds, from avariety of sources.$6.4,6.5,6.6$
Design and carry out simulations to estimate probabilities in situations6.3
for which the calculation of the theoretical probabilities is difficult orimpossible.
Assess the validity of some simulation results by comparing them with the theoretical probabilities, using the probability concepts developed in the course.
Represent complex tasks or issues, using diagrams.
Represent numerical data, using matrices, and demonstrate an understanding of terminology and notation related to matrices.
Demonstrate proficiency in matrix operations, including addition, scalar multiplication, matrix multiplication, the calculation of row sums, and the calculation of column sums, as necessary to solve problems, with and without the aid of technology.
Solve problems drawn from a variety of applications, using matrix methods.

