

Counting

CREDIT: The questions on this document were written by Erik Packard, PhD, Associate Professor of Mathematics at Colorado Mesa University.

- Problem 4
 - In how many ways can 6 runners finish a race if there are no ties?

- Problem 9
 - If you were to draw a tree diagram for checking 50 dogs to see if they have fleas or not, how many paths would have exactly 7 dogs with fleas?

- Problem 14
 - A club has 22 members, in how many ways can they:
 - A) Elect a President, Vice President, and Treasurer?
 - B) Select a committee of 3?
 - C) Pick the coolest, funniest, and smartest member? A person can hold more than one of these prestigious honors.