

# Applications to Combinatorics

Friday, April 10

How many ways could King Arthur and his 9 favorite knights sit around their 10 seat round table?

You have 31 flavors of ice-cream to choose from.

1. How many cones can you make using 3 distinct flavors?
2. How many milkshakes can you make using 3 distinct flavors?

King Arthur wants to put out placemats for his round table. Each of the 10 spots could get a blue or a gold placemat. How many different ways could he arrange the placemats?