Compound Probabilities

Instructions:

As a class, fill out the following 2-way frequency table about ice cream preferences. Then answer the questions below.

Preferred Ice Cream Flavor

Sports Involvement

	Vanilla	Chocolate	Rocky Road	TOTAL
Yes				
No				
TOTAL				

- 1. Show your work for each part of this question. What is the probability of randomly selecting:
 - a. A student involved in sports?
 - b. A student who is not involved in sports and prefers rocky road?
 - c. A student who is involved in sports and likes vanilla, or a student who is not involved in sports and prefers chocolate?
- 2. For each part of this question, choose which scenario will have a higher probability. Support your decision by including calculations.
 - a. A student that prefers vanilla, chocolate or rocky road?
 - b. A student not involved in sports that prefers vanilla or a student involved in sports that prefers rocky road?
 - c. A student not involved in sports that prefers chocolate or a student not involved in sports that prefers rocky road?