

This quiz covers material from 7.3 and 7.4. Show your work. It is acceptable if you set up but do not compute the answers.

1. (*2 points*) The probability that a student is enrolled in a Mathematics course is 40%. The probability that a student is enrolled in a History course is 35%. The probability that a student is enrolled in both is 10%. Draw a Venn Diagram that accurately depicts this information.

2. (*2 points*) Let E and F be two events that are mutually exclusive. Suppose $P(E) = \frac{1}{3}$ and $P(F) = \frac{1}{6}$. Calculate $P(E \cup F)$.

3. (*4 points*) A jar contains 100 jellybeans. Of those, 20 are licorice flavored and 80 are cherry flavored. Four jellybeans are selected at random without replacement.

a. (*2 pts*) What is the size of the sample space for this experiment?

b. (*2 pts*) What is the probability two licorice and two cherry jellybeans are chosen?