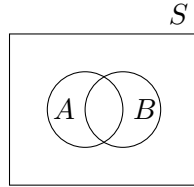


1. A total of 28% of American males smoke cigarettes, 7% smoke cigars, and 5% smoke both cigars and cigarettes.

(a) Label each of these probabilities on the diagram below:



(b) What percentage of males smoke neither cigars nor cigarettes?

(c) What percentage smoke cigars but not cigarettes?

2. An elementary school is offering 3 language classes: one in Spanish, one in French, and one in German. These classes are open to any of the 100 students in the school. There are 28 students in Spanish, 26 in French, and 16 in German. Also, there are 12 that are in both Spanish and French, 4 in both Spanish and German, and 6 that are in both French and German. In addition, there are 2 students taking all 3 classes.

(a) If a student is chosen randomly, what is the probability that they are not in any of these classes?

(b) If a student is chosen randomly, what is the probability that they are taking exactly one language class?