

Week 10 Practice

Question 1: In a particular city, 82% of the residents have a desktop computer, 47% have a desktop computer and a laptop computer, and 3% have neither a desktop nor a laptop computer. Find the probability that a randomly selected resident has a laptop computer.

Question 2: In your dresser are five blue shirts, three red shirts, and two black shirts. (Chap 11, Q5&7)

- a) What is the probability of randomly selecting a red shirt?
- b) What is the probability that a randomly selected shirt is not black?
- c) You have five blue shirts, three red shirts and two black shirts in your dresser. What is the probability that a randomly selected shirt is either a blue or a black shirt?

Question 3: Suppose that 25% of people have a dog, 29% of people have a cat, and 12% of people own both. What is the probability that someone owns a dog or a cat? (Chap11, 9)

Question 4: The survey found that 33% were currently in a relationship, and 25% were involved in sports. Eleven percent responded “yes” to both.

- a) While dining in a campus facility open only to students, you meet a student who is on a sports team. What is the probability that your new acquaintance is in a relationship?
- b) Are being in a relationship and being involved in sports independent? Are they disjoint?

Question 5: What is the probability that a person likes to watch hockey, given that she also likes to watch basketball? (Chap12, 1)

	Hockey	No Hockey
Basketball	27	13
No Basketball	38	22