

6. There are two boxes of tickets - one box has tickets with the numbers 1, 2, 2 written on them. (Yes, there are two tickets with a "2" on). The other box has tickets marked 1,2,3,4. One ticket is drawn at random from each box.
 - (a) Find the chance that the number from box A is the same as the number from box B.
 - (b) Find the chance that the number from box A is greater than the number from box B.
7. An elementary school in Logan employs 15 teachers; 11 are women and 4 are men. Two teachers are selected at random to meet the governor and attend a reception in SLC. Answer each part separately.
 - (a) What is the probability that both are women?
 - (b) What is the probability that at least one is a woman?
 - (c) What is the probability that both are the same gender?
8. I have 20 light bulbs a large box. Unknown to me, 4 of these 20 bulbs are broken. I select 6 bulbs at random from these 20 bulbs to put in a chandelier. *Answer each of the following questions separately.*
 - (a) What is the chance that the first bulb works?
 - (b) What is the chance that the second bulb works?
 - (c) What is the chance that all 6 of the bulbs work?
9. A pet store has 16 fish in a tank: 7 males and 9 females. I buy 2 of the fish, selected at random.
 - (a) What is the chance that both of my fish are males?
 - (b) What is the chance that both of my fish are females?
 - (c) What is the chance that one of my fish is male and the other is female?
 - (d) What is the chance that neither of my fish are male?
 - (e) What is the chance that at least one of my fish is male?