

Bellwork Tuesday, May 6, 2014

1. In your drawer at home you have 14 white socks, 10 black socks, 6 brown socks, and 4 blue socks. You wake up late and just reach in and grab a single sock. Find each probability as a fraction.

- a) $P(\text{black or blue})$
- b) $P(\text{white and black})$
- c) $P(\text{brown or not white})$

2. Using the same sock drawer from #1: You reach in and grab a random sock, put it back in, then grab another sock. Find this probability as a fraction:

P(black first and then a brown)

3. Given a standard deck of cards find each probability as a fraction assuming that you take out one card at random.

- a) $P(\text{King or Queen})$
- b) $P(5 \text{ of Clubs})$
- c) $P(\text{Heart and a Face Card})$
- d) $P(10 \text{ or a Diamond})$
- e) $P(\text{Red } 8)$

4. A survey of people's favorite fruit in conducted. The results are shown below. You will pick a person at random, find each probability as a fraction.

	Apple	Pear	Orange	Banana	Total
Male	73	64	80	51	268
Female	68	75	83	56	282
Total	141	139	163	107	550

- a) $P(\text{Apple})$
- b) $P(\text{Banana or Orange})$
- c) $P(\text{Female and Pear})$
- d) $P(\text{Male or Apple})$