

3. When you get fouled in basketball, you get to take 2 shots (“Free-Throws”). On his first shot, Mr. G makes 72% of his free-throws. If he misses his first shot, the probability of making it goes down by 10%. If he makes his first shot, the probability of making the second shot goes up 5%.
- Draw a tree diagram to represent this situation

b. $P(\text{Makes both shots}) =$

c. $P(\text{Makes exactly 1 shot}) =$

d. $P(\text{Makes his second shot} \mid \text{missed his first shot}) =$

4. In a class of 30 students, 22 students have dark hair and 16 of the dark hair students are right-handed. The rest of the students have blonde hair and 3 of the blonde students are left-handed.

(Leave answers b. to e. as fractions. You don't need to reduce them)

- Complete the table below

	Right-Handed (RH)	Left-Handed (LH)	Total
Dark Hair (D)			
Blonde Hair (B)			
Total			30

b. $P(D \cap LH) =$

c. $P(LH \cup B) =$

d. $P(D \mid RH) =$

e. $P(RH \cap B') =$

- In this class, are being right-handed and having dark hair independent? Explain.