

Tree diagrams, Tables, and sample Spaces

Problem 1. Use a tree diagram to find the sample space for the sample space for the genders of three children in a family.

Problem 2. If a family has three children, find the probability that they have at least one boy and one girl. (Assume that each child is equally likely to be a boy or girl.)





















































Problem 3. A coin is flipped, and then a die is rolled. Use a tree diagram to find the probability of getting heads on the coin and an even number on the die.

Problem 4. A card is drawn from an ordinary deck. Use the sample space shown below to find the probabilities of getting

(a) A jack

(b) The 6 of clubs

(c) A 3 or a diamond

	<u>Suit</u>			
	<u>Clubs</u>	<u>Spades</u>	<u>Hearts</u>	<u>Diamonds</u>
<u>Value</u>				
2				
3				
4				
5				
6				
7				
8				
9				
10				
Jack				
Queen				
King				
Ace				

Problem 5. When two dice are rolled, find the probability of getting

- (a) A sum of 8 (b) Doubles (the same number on each die) (c) A sum less than 5

		Red Die						
		1	2	3	4	5	6	
Green Die	1							
	2							
	3							
	4							
	5							
	6							