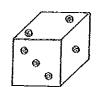
## **Problem Solving**

Complete the sample space below to show all the possible outcomes of rolling a blue die and a black die. Then use the sample space to solve each problem. Write each probability in simplest form.

Blue Die

			Dine Di	е		
	i	2	3	4	5	6
Black Die	1,1	2,1	3,1	4,1	5,1	6,1
	1,2	2,2	3,2	4,2	5,2	6,2
	1,3	2,3	3,3	4,3	5,3	6,3
	1,4	2,4	3,4	4,4	5,4	6,4
	1,5	2,5	3,5	4,5	5,5	6,5
	1,6	2,6	3,6	4,6	5,6	6,6





1. What is the probability of rolling a 1 and a 3?  $\frac{2}{36} = \frac{1}{18} = .0555$ 

The probability is 5.56 %

2. What is the probability of rolling 4's on both dice?  $\frac{1}{36} = .0277$ 

The probability is 2.78%.

3. What is the probability of rolling 4,5 or 5,4?  $\frac{2}{36} = \frac{1}{18} = .0565$ 

The probability is 5.56%

4. What is the probability of rolling two dice that total 10?  $\frac{3}{36} = \frac{1}{12} = .0833$ 

The probability is \_ 8.33%

5. What is the probability of rolling two dice that total 20? O

The probability is \_\_\_\_O %

6. What is the probability of rolling two dice that total less than 13?

The probability is 100 %