## Date: Block: Name:

Identify the sample space and the outcome shown for each experiment.

1) spinning a spinner

Algebra 1 Homework – 10-5 and 10-6



An experiment consists of rolling a standard number cube. Use the results in the table to find the experimental probability of each event. 7

		Outcome	ricqueriey
3) rolling a 1	4) rolling a 5	1	6
		2	7
		3	4
5) not rolling a 3	6) not rolling a number less than 5	4	10
		5	8
		6	5

An experiment consists of randomly choosing a colored card from a box. Use the results in the table to find the experimental probability of each event. 

		Outcome	Frequency
7) choosing a yellow card	8) choosing an orange card	red	7
		yellow	12
		orange	8
9) not choosing a white card	10) not choosing a red card	white	13

## Find the theoretical probability of each outcome.

11) rolling a number less than 4 on a standard number cube

- 12) randomly choosing a day of the week and it is a weekend
- 13) spinning red on a spinner with equal sections of red, blue, and green
- 14) randomly choosing the letter N from the letters in NUMBER

15) The probability it will snow is 60%. What is the probability it will not snow?

Outcome	Frequency
1	6
2	7
3	4
4	10
5	0

2) tossing two coins

## Find the theoretical probability of each outcome.

16) The probability of tossing two coins and having them land heads up is  $\frac{1}{4}$ . What is the probability the coins will not land heads up?

17) A spinner has red, green, blue, and yellow. The probability of spinning a red is 0.4, the probability of spinning a blue is 0.05 and the probability of spinning a yellow is 0.25. What is the probability of spinning a green?

18) Miguel entered a contest offering prizes to the top 3 finishers. The probability of winning 1st is 12%, the probability of winning 2nd is 18% and probability of winning 3rd is 20%. What is the probability that Miguel will not win any prize?

## The table shows how many of each letter are in a bag. Use the table for 19-20. Find the following.

19) <i>P</i> (A)	Letter	How Many in Bag
	A	5
20) <i>P</i> (B)	В	4
	C	6
	D 2	2
Find the theoretical probability of each outcome.	E	8

21) flipping one coin and having it land tails up

22) randomly choosing a yellow marble from a bag of 3 yellow marbles and 7 blue marbles

23) rolling a 1 on a number cube

- 24) randomly choosing the letter A from the letters in MATH
- 25) The probability it will rain is 10%. What is the probability it will not rain?
- 26) The probability of choosing a red marble from a bag is  $\frac{3}{4}$ . What is the probability of not choosing a red marble?

27) A spinner has red, green, and blue. The probability of spinning red is 0.2 and the probability of spinning blue is 0.3. What is the probability of spinning a green?

28) The probability of winning first place in a contest is 5%. What is the probability of not winning first place?

29) The table shows how many of each letter are in a bag.	
Find the following.	

a) *P*(A) b) *P*(not B)

Letter	How Many in Bag
A	6
В	4
С	5