Let's Review

1. What is the probability of rolling a die twice and getting a 5 both times?

2. What is the probability of rolling a die twice and getting an even number on both rolls?

3. What is the probability of rolling a die twice and getting a 3 on the first roll and a prime number on the second roll?

4. You have a hat with the numbers 1-20 in it. What is the probability of someone picking the number 7, replacing the number, and picking 7 again?

5. You have a hat with the numbers 1-20 in it. What is the probability of someone picking the numbers 2 or 12, replacing the number, and then picking a single digit number?

6. You have a hat with the numbers 1-20 in it. What is the probability of someone picking the number 5, not replacing the number, and then picking the number 2?

A career in the medical field might be neat!

A recent study by the American Pediatrics Association showed that 45% of children under the age of three years old are likely to get ear infections, while 20% are likely to get strep throat. Complete the table to determine the following probabilities.

	Ear infections (0.45)	No ear infections (0.55)
Strep throat (0.2)		
No strep throat (0.8)		

1. What is the probability that a child under the age of three will have both an ear infection and strep throat?

2. What is the probability that a child under the age of three will have an ear infection but not have strep throat?

3. What is the probability that a child under the age of three will not have an ear infection but will have strep throat?

4. What is the probability that a child under the age of three will not have an ear infection nor will they have strep throat?

A recent study released by the *Journal of the American Medical Association* presented findings that showed that 70% of all Americans over the age of 72 are likely to have a stroke and 60% are likely to break at least one bone. Complete the table to determine the following probabilities.

	Stroke (0.7)	No stroke (0.3)
No broken bones (0.4)		
Broken bones (0.6)		

5. What is the probability that someone over the age of 72 will have both a stroke and a broken bone?

6. What is the probability that someone over the age of 72 will have a stroke but not break a bone?

7. What is the probability that someone over the age of 72 will not have a stroke but will break a bone?

8. What is the probability that someone over the age of 72 will not have a stroke nor will they have a broken bone?