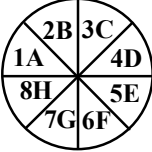
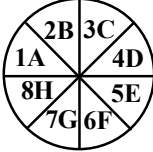

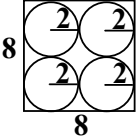


Looking Ahead: Algebra 2 Unit 11

The questions below are examples of the type of questions you'll see on your **Semester 2 Final**. This is how these tests will ask you to apply your skills from **Unit 11**, as well as your common sense math skills. They are structured in a way that is deliberately complicated, but the skills are the same as what you have learned up to this point.

Semester 2 Final Examples

1.	Jenna is bringing 5 shirts on vacation with her. If she has narrowed it down to 12 possibilities, how many ways can she choose a group of 5 shirts?	2.	Henry is buying 3 ties. If he has narrowed it down to 6 possibilities, how many ways can he choose a group of 3 ties?
3.	Determine the probability of stopping on an odd number or a vowel when spinning the spinner, assuming the spinner is fair. Write your answer as a percent to one decimal place. 	4.	Determine the possibility of stopping on a number that is not 1 or on a letter when spinning the spinner, assuming the spinner is fair. Write your answer as a percent to one decimal place. 
5.	When rolling a 6-sided number cube, what is the probability of rolling a number divisible by 2? Write your answer as a fraction in the simplest form.	6.	When rolling a 6-sided number cube, what is the probability of rolling a number that is a multiple of 3? Write your answer as a fraction in the simplest form.
7.	There are 8 songs on a playlist. How many different ways can they be played?	8.	There are 5 vases to arrange on a shelf. How many different ways that they be arranged?

9.	<p>What is the probability that a card player will pick an ace from a deck of 52 cards (4 of each kind), puts it back, and pick the same ace, assuming he shuffles between picks? Express your answer as a decimal rounded to the nearest hundredth.</p>	10.	<p>A magician has a deck of cards (52 cards with 4 of each kind). What is the probability that he will pick a 10, put it back, and pick a different 10, assuming he shuffles between picks? Express your answer as a decimal rounded to the nearest hundredth.</p>
11.	<p>What is the probability that a point chosen at random will be in the circle, but not in the triangle? Express your answer as a percent rounded to the nearest tenth.</p> 	12.	<p>What is the probability that a point chosen at random will be in the square, but not in one of the circles? Express your answer as a percent rounded to the nearest tenth.</p> 
13.	<p>A bag contains 3 jolly ranchers, 2 Kit Kat bars, and 7 Snickers bars. If Ms. G picks 3 candies at random and eats them immediately, what is the probability that she will pick a Kit Kat bar and 2 Snickers bars? Express your answer as a fraction.</p>	14.	<p>A box contains 8 red marbles, 2 green marbles, and 7 black marbles. If Sean picks 2 marbles at random, what is the probability that she picks a green marble and a red marble? Express your answer as a fraction.</p>
15.	<p>Determine the standard deviation of the data. {6, 4, 8, 2, 10, -3, 7, 6}</p>	16.	<p>Determine the standard deviation of the data. {7, 2, 4, 2, 0}</p>