Equal Ratios
Video Script

Scene		Full Transcript
1	**Skylar:**	What a spread! Hey, guys, Skylar here, and I'm at my friend, Kevin, and Jen's house, and they're getting ready to host a party for the big game. They're preparing food and refreshment for about 50 people. I brought the always-important napkins and a healthy appetite. While they're out running some last minute errands, I volunteered to make the lemonade and pop the popcorn. This seems like a perfect opportunity for a little refresher on the ratio table. What do you say? Why don't we get in the game and get another *Problem Solved*.
2	**Skylar:**	Jen wanted me to start by mixing the lemonade. This big container ought to do it. It says here that it holds 64 cups. Now, our lemonade mix says that it takes 3 scoops to make 8 cups of lemonade. Hmmm. Well, to figure out how many scoops we need to make 64 cups, we just refer to our ratio table. It looks like this, with the number of scoops in the top row, and the number of cups on the bottom. Our ratio is 3 scoops to 8 cups.
3	**Voice-Over Skylar:**	It often helps to draw a representation of what's going on. Here are the 3 scoops, and here are the 8 cups of lemonade. Now, if we double the number of scoops and cups, we would have an equal ratio, 6 scoops to 16 cups. If we tripled it, the ratio would be 9 to 24, and that can go on and on. But, how do we get to 64 cups? We all know that 8 times 8 equals 64. So, we must have to multiply the cups times 8 to get 64. Then, we just do the same to the number of scoops. Since we need 8 times as many cups of lemonade, we need 8 times as many scoops of mix. Eight times 3 scoops equals 24 scoops. Twenty-four scoops of mix will make 64 cups.
4	**Skylar:**	Mixed to perfection! Ratio tables can be useful when you have to compare a certain amount of one thing to a certain amount of another. If you take a ratio and multiply both quantities by the same number, you get an equal ratio. In our example, we used scoops of mix to cups of lemonade. Now, I wonder how much popcorn we need to pop.
5	**Voice-Over Skylar:**	The package says one bag has 2½ servings. The ratio table makes quick work out of this problem. The two rows are the number of bags and the number of servings. We know that one bag has 2½ servings. They bought 18 bags. Do they need to get more? If we double the number of bags to 2, we can serve 5 people, but we have 18 bags. We know that 9 times 2 equals 18. That's 9 times as many bags. So, that would make 9 times as many servings, 9 times 5, or 45. We have 45 servings, and they're expecting 50 guests. That means we need five more servings. How many more bags do they need? From the table, we see 2 bags makes 5 servings. We need two more bags.

6	**Skylar:**	So, you can multiply two quantities in a ratio by the same number to get an equal ratio, or you can add the quantities of two ratios in our table to get an equal ratio. Well, now that all the hard work is done, I've got the best seat in the house. *Problem Solved*!