Problem-Solving Strategy: Make an Organized List

Use the questions to help you solve.

1. Otis is designing a banner for the French Club. It will have two red stripes, two blue stripes, and one white stripe. Otis realizes that two stripes of the same color can’t be next to each other. How many possible banners are there?

State the rules for picking a banner in your own words.

How will you organize your list?

How can abbreviations help you make your list?

What are the color combinations on your list?

How can you check that your list includes every possibility?

2. Otis’s FFA chapter wants a banner, too. It should have two red stripes, one blue stripe, one white stripe, and one purple stripe. The two red stripes cannot be next to each other. Are there more possibilities for the FFA banner than for the French Club banner?