

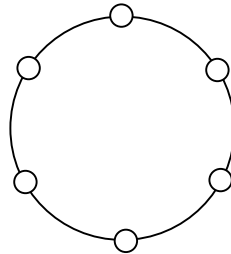
WHO WANTS TO BE A COMPOSER?

Step 1. Compose your own rhythm pattern, using an **X** for a drum hit and a **•** for a rest.

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Step 2. Write down all the rhythm patterns in your rhythm's equivalence class, called its *rhythm cycle*. Make sure there are no repeats. You may not need all the templates!

Step 3. Next, represent your rhythm cycle as a binary necklace that can be rotated but cannot be turned over. I've been using a filled circle for a drum hit.



Step 4: Questions.

1. How many different rhythm patterns of six beats are possible? _____
2. How many different patterns are in your cycle? ____ How many different rhythm cycles with six beats could there be? ____ (You might notice something weird going on.)
3. *Let's pause here while I ask some questions.* Does anyone in the audience have a different number of patterns in his or her cycle?
4. What are the possible answers to question (2)?
5. Suppose I had asked you to start with a rhythm pattern of seven beats instead of six. How would the possible answers to question (2) change? What are the possible numbers of patterns in cycles of twelve beats?

