

# Human Population '18 -- HW2 : Demographic Transitions in Mexico and Japan

due Feb 6

## Japan

Use InsightMaker to create a model for the demographic transition of the population of Japan (population stock: **[Japan]**) according to the data provided in Limits to Growth, Figure 2-6A, p. 34 (note the units!). Use **converters** to map birth and death rates from the figure to simulation years. Simulate from years **1900** to **2000**. Link the variable **Year** (using the function **Year()**) to the converters. Link the converters to the **birth** and **death rates**, as appropriate. And link the **birth** and **death rates** to the input and output flows (**[birth]** and **[death]**) to and from the population stock **[Japan]**.

Run simulations. Try to reproduce the final year 2000 population of Japan by adjusting only the variables in the two converters.

## Mexico

Select all except **[Japan]** and make a **folder** called "Model for Japan". Copy the whole model. Change the name of the new folder to "Model for Mexico" and the name of new **[Japan]** stock to **[Mexico]**. Edit the **birth** and **death** flows to use the new name. Then edit the converters to use the data from Figure 2-6B. Run simulations and again try to reproduce the the 2000 population of Mexico by adjusting only the variables in the two converters.

## Simulate

In the Simulate window add a separate **display** called "Mexico". Rename the first display "Japan". Configure the "Mexico" display to show the population and birth/death rates as before. Create a third display called "side by side" and configure it to show just the populations of the two countries.

## Beautify

Select your "Model for Japan" folder. Collapse it. Re-size it in the collapsed state. Make the title bold, italicized and underlined. Color the background. Add a custom image using a URL obtained by a Google search of images using "Japan".

Do the same for Mexico.

## Tell a story

Use the **Share | StoryTelling** function to write a "walk-through" of the two models. Start with both folders collapsed. Edit the story. Each step in the story should be a **Group** of steps. The first group of steps should **expand** and **highlight** "Model for Japan" and **dim** everything else. Second group should run a **simulation** and show a **message**. Third group should **close** the simulation window\*, **collapse** "Model for Japan", **highlight** "Model for Mexico" and **dim** everything else. Fourth group should run a **simulation** showing the "Mexico" display and show

a **message**. Finally, the last group should **close** the simulation window\*, **collapse** the "Model for Mexico", run a **simulation** and display "side by side", and show a **message**.

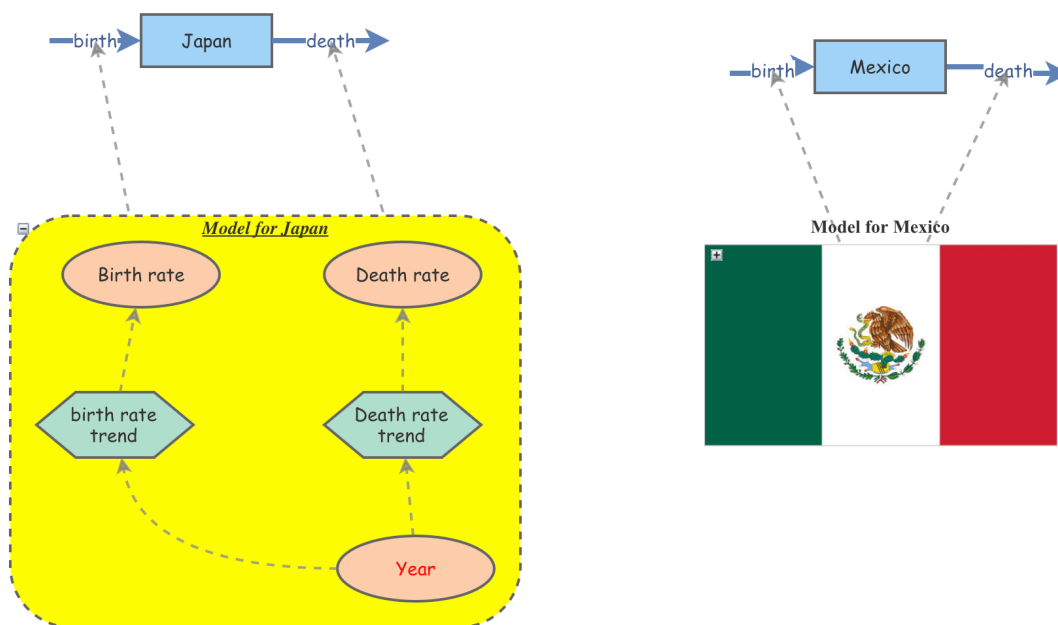
You may add other functions as you wish. Be creative!

\*The close the simulation window, **Add Step | Run Action**, type in **closeAllWindows()**  
This is one of the InsightMaker API functions.

### **Publish!**

Use the **Share | Publish article** function to make the insight public and then convert it to a web page. If you want to make changes after converting, go ahead and change the insight and **Update** the web page in the **Publish Article** window.

Send me the link by email! You're done.



What your combined models should look like if one folder is open and the other is closed.