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| **Canadian Geography** | **Cgc1dw** |

**Human Systems: Calculating Growth**

**Part A**

1. What is the Rule of 70? Why is the Rule of 70 so useful?
2. How long would it take for a population to double with each of the following growth rates?
   1. O.5% b. 1.0% c. 1.5% d. 2.0% e. 3.0%
3. The population growth of a country depends both on Natural Increase and Net Migration. Define each of these terms. Which one is more important to Canada?
4. Why do we have approximately 250,000 new immigrants come into Canada each year?
5. Considering that people are a ‘higher trophic’ species yet population growth graphs show a pattern more like mice or cockroaches… use the ‘power of compounding’ to explain this.
6. What is meant by the demographic divide?

**Part B**

Using the information and formulas from our powerpoint on demography, complete the following questions.

1. Kyrgyzstan
   1. Kyrgyzstan has a CBR of 23.67/1000 and a CDR of 6.83/1000. What is its Natural Increase Rate?

* 1. What does it mean if Kyrgyzstan has a net migration rate of -7.13/1000?
  2. Calculate both the growth rates and doubling time for Kyrgyzstan.

1. Mali
   1. Mali has a CBR of 46.06/1000 and a CDR of 13.55/1000. What is its Natural Increase Rate?
   2. Calculate Mali’s Growth Rate using their net migration rate of - 2.41.
   3. What will Mali’s doubling time be?
2. Monaco
   1. Monaco has a CBR of 6.79/1000 and a CDR of 8.75/1000. What is its Natural Increase Rate?
   2. Calculate Monaco’s Growth Rate and Doubling Time. Monaco has a net migration rate of 1.93/1000
3. Sweden
   1. Sweden’s CBR is 10.33; its CDR is 10.22, and its net migration 1.64. Calculate Growth Rate and Doubling Time.

EXTRA

If a country had a population of 2.7 million, a birth rate of 6.3 per thousand, and a death rate of 4.1 per thousand:

* 1. What would be the actual number of births. ( We didn’t do this in class… see if you can figure it out?)
  2. What would be the actual number of people given this rate of natural increase?