

# POPULATION PROBLEMS

1. A country called San Ramos is tracking population. In 1822, population was 800,000 with an annual growth rate of 0.8%. The crude birth rate was 35 per 1000. Immigration was at 5 people per 1000. There was no net emigration. What was the death rate?
2. On an island called Ramoawaii, the population growth rate was 0.7%. The birth rate was 42/1000 and the death rate was 38/1000. Was there net migration? By how much?

3. If a population has a death rate was 41 per 1000 and a birth rate of 37 per 1000 people, how long will it take for the population to double?

4. If it takes a country 40 years to double its population, what is its annual growth rate? If it takes a country 10 years to double its population, what is its annual growth rate?

5. In 1922 the BR for the country of Ramostan to 37 per 1000 and the death rate to 12 per 1000. The population was 2.5 million. Determine what the population size of this country would be today if it continues to grow at the annual rate established in 1922.

# More Population Problems...

- A country called Ramosville is tracking population. 1845, population was 1.2 million, the crude birth rate of 50 per 1000. The death rate was 45 per 1000. In 1870 the population grew rapidly as the BR remained at its 1845 level while the crude DR dropped to 30, 1000. Population growth continued until the late 1800's even though the BR began to decline slowly. In 1885 the BR dropped to 42 and the death rate to 19/1000. In 1885 the population was 2.5 million. By 1950 population growth gradually began to decline as the DR remained at its 1885 level while the BR continued to decline to 22 per 1000. In 1977 stats revealed the DR was 10/1000 and the population growth had slowed to 1.2%. Graph the BR/DR/and population vs. time. Calculate the "r" in 1885. If "r" continued as in 1885, what would be the # people present in Ramosville today?

- Sketch a transitional population graph. Label BR, DR, overall population. Also indicate the four different transitional phases for human populations.
- For the graph above, list 4 factors that cause BR and DR to be high in preindustrialized countries. For the graph above, list 3 factors that cause DR to decrease in transitional and industrial countries. For the graph above, list 3 factors that cause BR and DR to be low in postindustrial countries.
- List a country for each of the four different demographic phases mentioned above.