**Warm Up Activity**

**Unit 5.1: Functions, Statistics, and Trigonometry**

Use the on-line CIA World Factbook (Search “CIA World Factbook” with Google) to find the **current population and annual population growth rate** of Western Sahara.

Date Accessed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Current Population: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Annual Population Growth Rate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

a) What will the population be in one year from the most current estimate?

b) What was the population one year before the most current estimate?

c) Express the population P as a function of n, the number of years from now.

d) What will be the population in 25 years? What assumption do you need to make in order to answer this part?

e) How long will it take until the population is twice what it is today? Four times? Eight times?

f) Does Western Sahara have a relatively high growth rate? Explain.