

**Problem 1**

Below is GDP per capita (PPP) for the United States and India in 1990 and 2005 from the [World Development Indicators database](#).

GDP per capita (PPP, Constant 2011 International \$)

|                      | <b>1990</b> | <b>2005</b> |
|----------------------|-------------|-------------|
| <b>India</b>         | 1,770       | 3,210       |
| <b>United States</b> | 37,060      | 49,760      |

Using these numbers answer the following questions:

1.1) Compute the average annual percent growth rate of GDP per capita (PPP) for the United States and India between 1990 and 2005. Round your answer to one decimal point.

1.2) Suppose both countries continue growing at their current rates for another 25 years after 2005. What will GDP per capita be in each country in 2030? How much higher will GDP per capita be in the United States be in 2030 in proportion to GDP per capita in India.

1.3) Assuming their current growth rates continue, how many years from 2030 will it take for the two countries to converge so that GDP per capita is the same in each country? Round to the nearest integer.