

Task 2_LR – Population Growth

1. Find a country (either yours or the one you like) for which you can population size (similar to Sweden in the table).
2. For historical data, calculate: Net Change, Ratio of Increase, Growth (halving) time.
3. Make a line graph for the growth rates and write a short comment
4. For the same country, find the current data on population size for
5. For current data, calculate the growth rate and make the line graph
6. Calculate and answer the question: What will be the population of are the assumed growth rates (see the table)?

Sweden	Population (P)	Net change	Ratio of Increase	Growth rate	Doubling time
1570	900,000				
1650	1,225,000				
1700	1,485,000				
1720	1,350,000				
1750	1,780,700				
1770	2 042 574				
1800	2,347,300				
1820	2 584 690				
1850	3,482,500				
1870	4 168 525				
1900	5,136,400				
1920	5 904 489				
1950	7,041,900				
1970	8 081 229				
2000	8,882,800				
2020	10,099,265				

Sweden	Population (P)	Growth rate
2000	8,882,800	
2001	8 909 128	
2002	8 940 788	
2003	8 975 670	
2004	9 011 392	
2005	9 047 752	
2006	9 113 257	
2007	9 182 927	
2008	9 256 347	

2009	9 340 682	
2010	9 415 570	
2011	9 482 855	
2012	9 555 893	
2013	9 644 864	
2014	9 747 355	
2015	9 851 017	
2016	9,836,007	
2017	9,904,896	
2018	9,971,638	
2019	10,036,379	
2020	10,099,265	

6.: What will be the population of Earth in 2100 if there are the assumed growth rates (:

Earth	r (%)	Population
2020-2040	1.21	
2040-2060	0.92	
2060-2080	0.74	
2080-2100	0.45	

get historical data on

growth rate and Doubling

time

from 2000-2021 (2020).

hours.

of Earth in 2100 if there

Homework is due to: 16. 3. 2023

see table)

$$P(t) = P_0 \cdot e^{(r \cdot t)}$$