## TOPIC: POPULATION GROWTH

### Population Growth & Composition

◆ Demographers look at how the _____and composition of a population changes.

- The **size** depends on the _____ of birth & death.

**Fertility**

- **Fertility Rate:** Number of _____.
- **Crude Birth Rate:** Number of live births per 1000 people in a population per year.

**Mortality**


- **Mortality Rate:** Number of _____.
- **Crude Death Rate:** Number of deaths per 1000 people in a population per year.

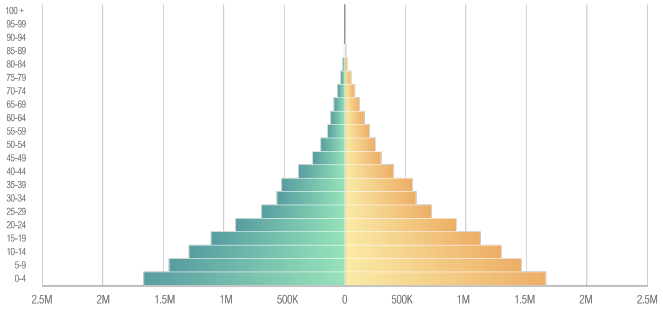
**Fertility > Mortality**
Population _____.

**Fertility = Mortality**
Population _____.

**Fertility < Mortality**
Population _____.

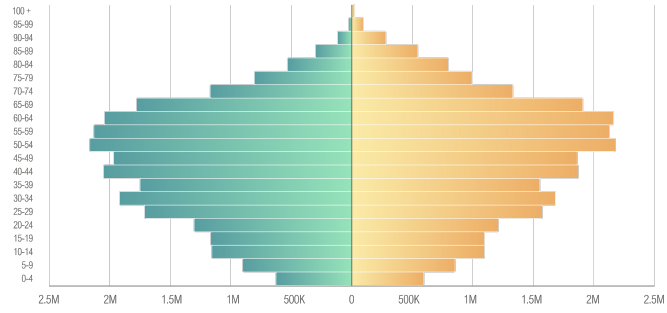
- The **composition** can be analyzed by looking at the sex & age of the population.
  - **Sex Ratio:** Number of men per _____ women.
  - **Age Sex Pyramid (Population Pyramid):** Graphic representation of the age & sex of a population.

**Example 1: Chad (data from 2025)**




☐ Birth rate ☐ Death rate

**Example 2: South Korea (data from 2025)**



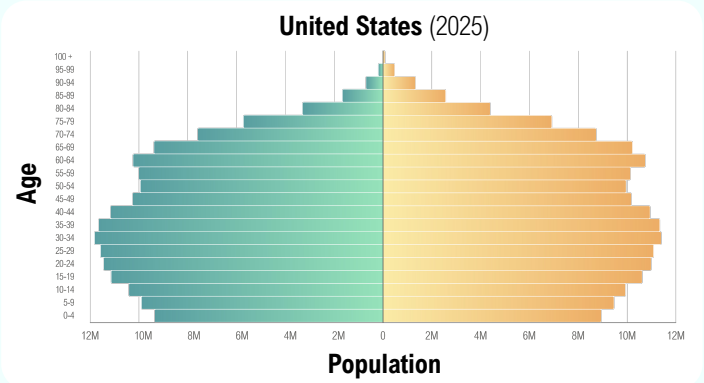

☐ Birth rate ☐ Death rate

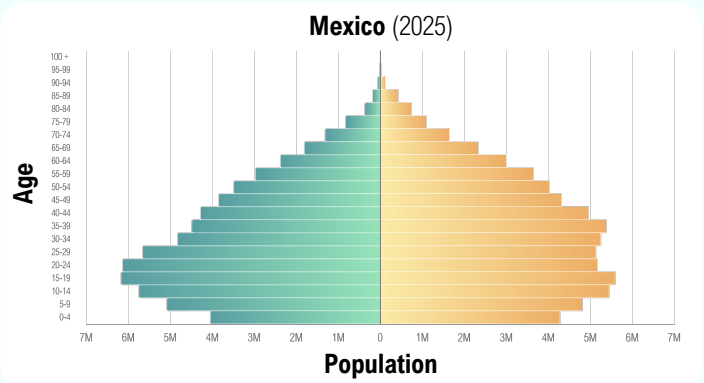
United States Census Bureau, International Database. Accessed September 2025 from https://www.census.gov/data-tools/demo/idb/#/dashboard?dashboard_page=country&COUNTRY_YR_ANIM=2025&CCODE_SINGLE=**&subnat_map_admin=ADM1&CCODE=**

## TOPIC: POPULATION GROWTH

### EXAMPLE

Two population pyramids for different countries are shown below. Based on these graphs, what inferences can you draw about these countries?




Source: U.S Census Bureau, International Database

_____ _____

_____ _____

_____ _____

### PRACTICE

If the crude death rate surpasses the crude birth rate, the population of an area will _____.

a) Increase.

b) Stay the same.

c) Decline.

## TOPIC: POPULATION GROWTH

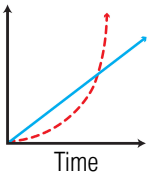
### Malthusian, Zero Population Growth, & Cornucopian Theory

◆ Some sociologists worry about uncontrolled population growth:

## Malthusian Theory

◆ **Thomas Malthus** (1766 – 1834): English clergyman who worried about population growth.

- **Human population** increases _____ than **food production.**
  - *Without*: Birth control & abstinence.
  - *We will have*: _____, famine, & disease.




## Zero Population Growth

◆ **Paul Ehrlich**: Built upon Malthus's work, focusing on the environment.

- Environmental resources are _____, and get exploited by privileged individuals.
- Should aim to have the birth rate _____ the death rate to slow population growth.

## Cornucopian Theory

◆ Technology will advance to _____ the needs of the population.

◆ Population seen as a driver of _____, not a threat.

## TOPIC: POPULATION GROWTH

### EXAMPLE

Determine if the following statements are true or false. If the statements are true, write “T” on the line; if they are false, write “F”.

| | | |
|---|---|---|
| 1 | Zero population growth advocates for the fertility rate to match the death rate. | |
| 2 | In Malthusian theory, food production is unable to keep up with population increase. | |
| 3 | Cornucopia theory states that war, famine, and disease are unavoidable with uncontrolled population growth. | |
| 4 | Thomas Malthus, who created the Malthusian theory, studied biology and ecosystems. | |

### PRACTICE

Which theory of population growth focuses on the environmental impact of overpopulation and the exploitation of resources by the wealthy?

a) Malthusian theory.

b) Zero growth model.

c) Cornucopia theory.

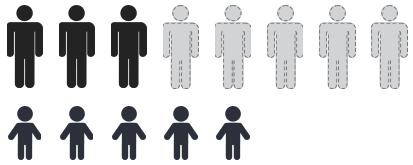
d) Demographic transition theory.

## TOPIC: POPULATION GROWTH

- **Demographic Transition Theory:** Demographic changes are _____ and are related to technology.
  - ____ stages:

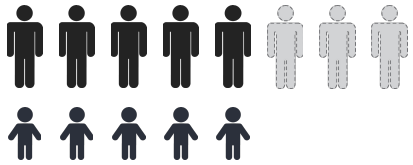
### STAGE 1

| | |
|---|---|
| **Technology** ➡ | _____- industrial |
| **Birth Rate** ➡ | High |
| **Death Rate** ➡ | High |
| **Change in Population** ➡ | _____ 8 ➡ 8 |



### STAGE 2

| | |
|---|---|
| **Technology** ➡ | _____- industrial |
| **Birth Rate** ➡ | High |
| **Death Rate** ➡ | Declining |
| **Change in Population** ➡ | _____ 8 ➡ 10 |

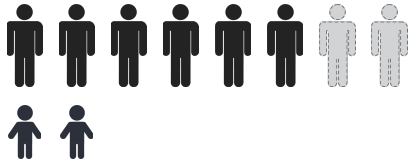


### STAGE 3

| | |
|---|---|
| **Technology** ➡ | _____- industrial |
| **Birth Rate** ➡ | Declining |
| **Death Rate** ➡ | Low |
| **Change in Population** ➡ | _____ 8 ➡ 9 |

### STAGE 4

| | |
|---|---|
| **Technology** ➡ | _____- industrial |
| **Birth Rate** ➡ | Low |
| **Death Rate** ➡ | Low |
| **Change in Population** ➡ | _____ 8 ➡ 8 |



## TOPIC: POPULATION GROWTH

### EXAMPLE

For each description below, write which stage of demographic transition theory the population is **likely** in. Use the following data to help you answer it:

**Average life expectancy globally:** 73.1 years
**Average fertility rate:** 2.29 births per woman

a) In this country, the life expectancy is 85 years, and the fertility rate is 1.2 births per woman. Most individuals work in service sector jobs. This country is likely in stage _____.

b) This society relies on agriculture as its primary source of economic output. The birth rate is 5 births per woman, and the life expectancy is 60 years. This country is likely in stage _____.

c) In this country, most individuals work in a factory. Life expectancy is 74 years, and the fertility rate is 2.4 births per woman. This country is likely in stage _____.

### PRACTICE

If a country is described as post-industrial, which of the following would you expect based on demographic transition theory?

a) High birth rate; low death rate.

b) High birth rate; high death rate.

c) Low birth rate: low death rate.

d) Low birth rate: high death rate.