

CHAPTER 6--THE HUMAN POPULATION AND ITS IMPACT

Student: _____

1. According to the United Nations, China's population should reach what size by the year 2025?
 - A. 1.1 billion
 - B. 1.2 billion
 - C. 1.3 billion
 - D. 1.4 billion
 - E. 1.5 billion
2. At the current time, how many people on earth do not have their basic needs met?
 - A. 1.1 billion
 - B. 1.2 billion
 - C. 1.3 billion
 - D. 1.4 billion
 - E. 2 billion
3. What was the average number of children born to a woman in China in 2009?
 - A. 1.0
 - B. 3.4
 - C. 2.1
 - D. 1.6
 - E. 5.7
4. What was the average number of children born to a woman in the United States in 2009?
 - A. 1.0
 - B. 3.4
 - C. 2.1
 - D. 1.6
 - E. 5.7
5. The exponential rate of growth of the total human population over the past 100 years resulted from
 - A. large birth rate increases
 - B. sharp drop in death rates
 - C. significant immigration
 - D. leveling off of death rates
 - E. fewer epidemics

6. What percentage of the people that will be added to the human population by 2050 will be born into less-developed countries?
- A. 92%
 - B. 52%
 - C. 18%
 - D. 82%
 - E. 44%
7. If the human population levels off during the 21st century, it will move from a "J-shaped" curve to what curve shape?
- A. N
 - B. I
 - C. S
 - D. P
 - E. C
8. Demographers estimate the human population of 2050 to be between 7.8 and 10.8 billion, based on several factors. Which one of these is not one of those factors.
- A. reliability of current estimates
 - B. projections of likelihood of drought, famine, and war
 - C. assumptions about trends in fertility
 - D. different organizations use differing sets of data and methods to make estimates
 - E. none of these are one of the factors
9. The concept of an optimal human population level, which allows most people to live in reasonable comfort and freedom without impairing the future sustainability, is called
- A. optimization strategy
 - B. genetic optimization
 - C. stabilization theorem
 - D. nil hypothesis
 - E. cultural carrying capacity
10. At today's level of consumption, scientists estimate that we would need the equivalent of how many planet Earths to sustain our per capita use of resources?
- A. 1.0
 - B. 1.1
 - C. 1.2
 - D. 1.3
 - E. 2.0

11. By 2050, if the population increase estimates are correct and everyone reaches the current U. S. level of resource consumption per person, we will need how many planet Earth's?
- A. 1
 - B. 2
 - C. 3
 - D. 4
 - E. 5
12. Population change is calculated using which of the following formulas?
- A. $(\text{deaths} + \text{emigration}) - (\text{births} + \text{immigration})$
 - B. $(\text{births} + \text{immigration}) - (\text{deaths} + \text{emigration})$
 - C. $(\text{deaths} + \text{immigration}) - (\text{births} + \text{emigration})$
 - D. $(\text{births} + \text{emigration}) - (\text{deaths} + \text{immigration})$
 - E. $(\text{births} + \text{deaths}) - (\text{immigration} + \text{emigration})$
13. The crude birth rate is the number of live births per ____ persons in a given year.
- A. 50
 - B. 100
 - C. 500
 - D. 1,000
 - E. 100,000
14. The total fertility rate is
- A. the number of children born to a woman during her lifetime
 - B. the number of children a couple must bear to replace themselves
 - C. the average number of children born to women in their reproductive years
 - D. the number of live births per 1000 people
 - E. the births and immigrations into a population
15. The total fertility rate (TFR), between 1955 and 2010, dropped in less-developed countries from 6.2 to what level?
- A. 3.2
 - B. 2.8
 - C. 4.5
 - D. 1.8
 - E. 2.1
16. The U.S. total fertility rate has remained at or below replacement rate since what year?
- A. 1942
 - B. 1952
 - C. 1962
 - D. 1972
 - E. 1982

17. The replacement-level fertility rate is ____ for developed countries and ____ for developing countries.
- A. 1.6; 1.9
 - B. 2.5; 2.0
 - C. 2.0; 2.5
 - D. 2.1; 2.5
 - E. 1.8; 2.1
18. The U.S. population is
- A. slowly growing
 - B. slowly declining
 - C. basically stable
 - D. rapidly declining
 - E. rapidly growing
19. If every woman on earth had no more than an average of 2.1 children during their reproductive years, the human population would continue to rise for how long?
- A. 5,000 years
 - B. 150 years
 - C. 50 years
 - D. 20 years
 - E. 5 years
20. The 2010 U.S. population of 310 million is expected to reach what level by 2050?
- A. 500 million
 - B. 439 million
 - C. 415 million
 - D. 375 million
 - E. 350 million
21. Which of the following is *not* one of the factors currently affecting birth and fertility rates?
- A. number of people 60 or older
 - B. cost of raising and educating children
 - C. urbanization
 - D. educational and employment opportunities for women
 - E. average age at marriage
22. Which of the following is *not* an economic factor decreasing the likelihood of a couple having a child?
- A. need for child to be part of the labor force
 - B. religious beliefs
 - C. cost of child's education
 - D. lack of a pension system
 - E. employment opportunities for women

23. Which of the following would decrease the likelihood of a couple having a child?
- A. The child is part of the family labor force.
 - B. Contraceptives are not available.
 - C. Women have opportunities to participate in education and employment.
 - D. No public or private pension system exists.
 - E. Infant mortality rates are high.
24. Two useful indicators of overall health in a country or region are
- A. birth rate and death rate
 - B. replacement-level fertility rate and total fertility rate
 - C. life expectancy and death rate
 - D. life expectancy and infant mortality rate
 - E. population growth rate and death rate
25. Infant mortality rate refers to the number of children per 1,000 births that die
- A. by their fifth birthday
 - B. before their first birthday
 - C. before six months
 - D. in their first month
 - E. before birth
26. Worldwide, how many children under 1 year of age die each day of preventable causes.
- A. 500
 - B. 1,000
 - C. 3,000
 - D. 5,500
 - E. 11,000
27. Since 1955 the global life expectancy has risen to
- A. 48 years
 - B. 52 years
 - C. 69 years
 - D. 72 years
 - E. 78 years
28. All of the following reasons help explain why the United States has one of the highest infant mortality rates of developed countries, *except*
- A. inadequate health care for pregnant poor women
 - B. women delaying getting pregnant until later in life
 - C. drug addiction among women
 - D. high birth rate among teenagers
 - E. inadequate health care for babies after birth

29. According to recent research, how many environmental refugees were there in the year 2008?
- A. 100,000
 - B. 1,000,000
 - C. 5,000,000
 - D. 25,000,000
 - E. 40,000,000
30. Currently, legal and illegal immigration account for approximately how much of the U.S. annual population growth?
- A. 100%
 - B. 36%
 - C. 63%
 - D. 24%
 - E. 15%
31. An age structure graph represents the number or percentage of
- A. reproductive age females
 - B. reproductive age males and females
 - C. non-reproductive age males and females
 - D. economic status of reproductive males and females
 - E. males and females among age groups in a population
32. Countries that have reached zero population growth have an age structure diagram that
- A. forms an inverted pyramid
 - B. forms a broad-based pyramid
 - C. has little variation in prereproductive and reproductive age groups
 - D. has a large pre-reproductive population
 - E. has a large reproductive population
33. Rapidly growing countries have an age structure diagram that
- A. forms an inverted pyramid
 - B. has a broad-based pyramid
 - C. shows little variation in population by age
 - D. has a small pre-reproductive population
 - E. has a large post reproductive population
34. A country with a TFR that falls below 1.5 children per couple for a prolonged period will experience all of the following *except*
- A. sharp rise in proportion of older people
 - B. increasing demand on medical care
 - C. increasing demand on social security funds or its equivalent
 - D. labor shortages
 - E. increasing number of working taxpayers.

35. Problems associated with rapid population decline include all of the following *except*
- A. less government revenues with fewer workers
 - B. less new business formation
 - C. increased pensions and lowered retirement age
 - D. less likelihood for new technology development
 - E. increasing public deficits
36. The author suggests that one of the most important statistics is that nearly 30% of the people in less-developed countries are under 15 years of age. Why is this important?
- A. Young people buy lots of goods and services.
 - B. Young people will be the leadership of the future.
 - C. Young people will feel the effects of global warming.
 - D. Young people don't have good sense.
 - E. Young people are poised to move into their prime reproductive years.
37. Which of the following is *not* an effect of a high level of AIDS in a country?
- A. loss of productive young workers
 - B. loss of trained personnel
 - C. increase in life expectancy
 - D. loss of adults to support the young
 - E. loss of adults to support the elderly
38. Worldwide, AIDS is the leading cause of death for people _____ years of age.
- A. 1-4
 - B. 5-14
 - C. 15-49
 - D. 50-65
 - E. 66+
39. Which of the following is *true* of demographic transition as countries become industrialized?
- A. Death rates drop, followed by birth rates.
 - B. Birth rates drop, followed by death rates.
 - C. Birth and death rates rise at the same time.
 - D. Birth and death rates fall at the same time.
 - E. Neither birth nor death rates fall.
40. Demographic transition may be hindered in some developing countries by all of the following *except*
- A. shortages of scientists and engineers
 - B. insufficient financial capital
 - C. large debts to developed countries
 - D. a drop in economic assistance from developed countries
 - E. surplus of skilled workers

41. Which of the following is *not* a stage of the demographic transition model?
- A. preindustrial
 - B. industrial
 - C. pre-transitional
 - D. transitional
 - E. postindustrial
42. Which of the following is *not* true of women globally?
- A. do less than 50% of work associated with growing food
 - B. work two-thirds of all hours worked but receive only 10% of world's income
 - C. own less than 2% of world's land
 - D. make up 70% of world's poor
 - E. represent 64% of world's illiterate adults
43. In the demographic transition model, death rates fall while birth rates remain high during
- A. the preindustrial stage
 - B. the industrial stage
 - C. the postindustrial stage
 - D. the transitional stage
 - E. following the postindustrial stage
44. Women tend to have fewer and healthier children for all the following reasons, *except*
- A. when their individual rights are protected
 - B. earn an income of their own
 - C. when they have access to education
 - D. when they control their own fertility
 - E. when they have access to the internet
45. All of the countries below have shown that replacement level fertility can be reached in a decade or two, *except*
- A. Egypt
 - B. Japan
 - C. Thailand
 - D. Iran
 - E. China
46. All of the following are true of India's resource and environmental problems *except*
- A. India has 17% of world's people, but only 2.3 % of world's land resources
 - B. about one-half of India's cropland is degraded
 - C. about two-thirds of its water is seriously polluted
 - D. India has about 15% of the world's forests
 - E. sanitation services are often inadequate

47. Which of the following is *not* true about India?
- A. One out of four people is poor.
 - B. It has the fourth largest economy
 - C. 80% of rural people have adequate sanitation.
 - D. Nearly one-half of the people are unemployed or underemployed.
 - E. 40% of the population suffers from malnutrition.
48. The world's first national _____ program began in India in 1952.
- A. family planning
 - B. economic transition
 - C. literacy
 - D. sterilization
 - E. urbanization
49. Ninety percent of Indian couples have access to modern birth control methods, with what percentage actually using one?
- A. 80%
 - B. 49%
 - C. 62%.
 - D. 10%
 - E. 31%
50. Which of the following statements is *not* true about China?
- A. China's poverty rate is about half that of India
 - B. only 19% of China's people are under age 15
 - C. 90% of Chinese couples use some form of birth control
 - D. China has very few critical resource and environmental problems
 - E. India's population will exceed China's by 2015
51. The population of China is growing faster than the population of the United States.
- True False
52. From 1972 until 2009 the average number of children born to a woman in China went from 1.6 to 5.7.
- True False
53. There is general agreement that we have not reached the carrying capacity on earth for the human population.
- True False

54. The growth rate of the human population is 7 times higher in the developing world than in the developed world.
- True False
55. There is no likelihood of stabilizing the human population in the near future.
- True False
56. Reaching the replacement-level fertility rate means a quick halt to population growth.
- True False
57. The population of the United States is growing more quickly than any other developed country.
- True False
58. The total fertility rate (TFR) for the United States is higher than the TFR for China.
- True False
59. About two-thirds of the growth in the U.S. population in 2010 will be the result of births outnumbering deaths.
- True False
60. In the world's poorest countries, life expectancy is at 49 years or less and may fall further.
- True False
61. Infant mortality is one of the best measures of a society's quality of life.
- True False
62. In the United States, between 1820 and 1960 most legal immigration came from Asia.
- True False
63. Retirement of baby boomers is likely to create a shortage of workers in the U.S.
- True False
64. In 2009 5% of the U.S. population was Hispanic.
- True False
65. In African countries where 15-26% of the adult population is infected with HIV, life expectancy is expected to drop sharply.
- True False

66. The UN Population Fund indicates that less than 20% of all pregnancies in less-developed countries are unplanned, while 10% end with abortion.

True False

67. Family planning reduces the number of legal and illegal abortions performed each year, and decreases deaths of mothers and fetuses during pregnancy.

True False

68. India has a middle class approximately the same size as the entire population of the U.S.

True False

69. Worldwide, 900 million girls do not attend elementary school.

True False

70. Globally, women own 40% of the world's land.

True False

71. Worldwide the number of school-age girls who do not attend elementary school is more than 3 times the population of the United States.

True False

72. Family planning is responsible for a majority (55%) of the drop in total fertility rates (TFRs).

True False

73. Because there are fewer children per couple being born in China, the population overall is rapidly aging.

True False

74. India has a thriving and rapidly growing middle class.

True False

75. Except for a few oil-rich countries, no less-developed country has succeeded in becoming modernized without slowing population growth.

True False

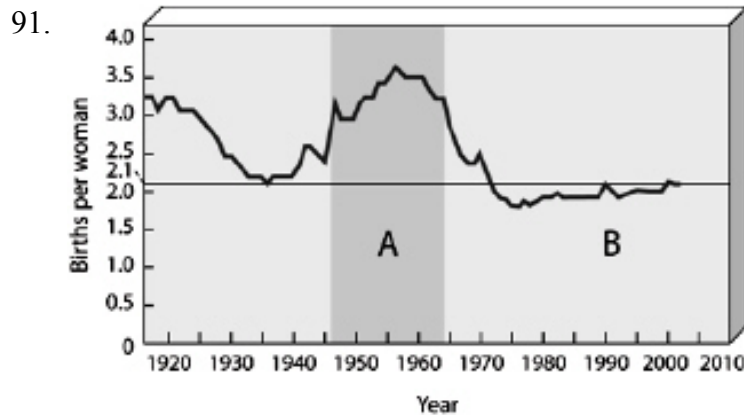
76. Between 1972 and 2009, China cut its birth rate _____.

77. Human activities have directly affected, to some degree, about _____ of the earth's natural systems.
- _____
78. The _____ is the number of live births per 1,000 people in a population in a given year.
- _____
79. The _____ is the number of deaths per 1,000 people in a population in a given year.
- _____
80. The rapid growth of the world's population over the past 100 years is primarily the result of a(n) _____ in the crude _____.
- _____
81. The _____ rate is lower in more-developed countries as compared to less-developed countries because fewer children die before entering their reproductive years in more-developed countries.
- _____
82. The U.S. generation born between 1946 and 1964 is known as the _____ generation.
- _____
83. In areas with a low _____ rate women normally have fewer children.
- _____
84. The United States ranks _____ in the world in terms of infant mortality rates.
- _____
85. The global population of seniors (over 65) will _____ by the year 2050.
- _____
86. A country with many people younger than age 15 will experience rapid population growth, unless death rates rise sharply, a phenomenon called _____.
- _____
87. Unlike malnutrition, AIDS kills many _____.
- _____

88. In stage _____ of demographic transition, birth rates remain high and death rates have dropped due to improved food production and health.

89. China has cut its total fertility rate from 5.7 to _____ in less than 40 years.

90. About _____ of India's population struggles to live on the equivalent of less than \$4.25 a day.

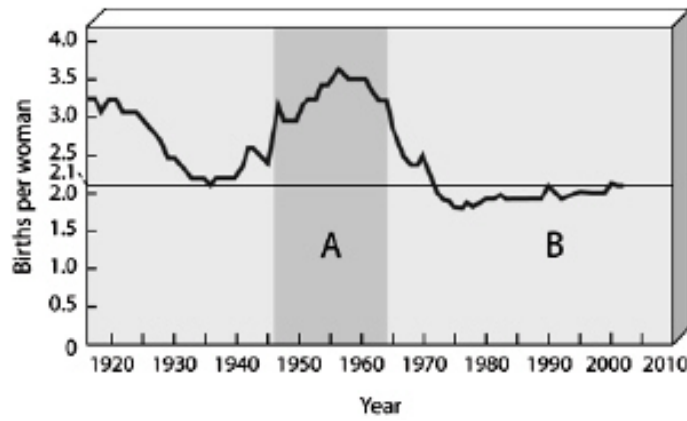


Total Fertility Rates for the United States

Use the Figure above to answer the following question(s).

What is the name given the shaded area indicated by the letter A?

92.

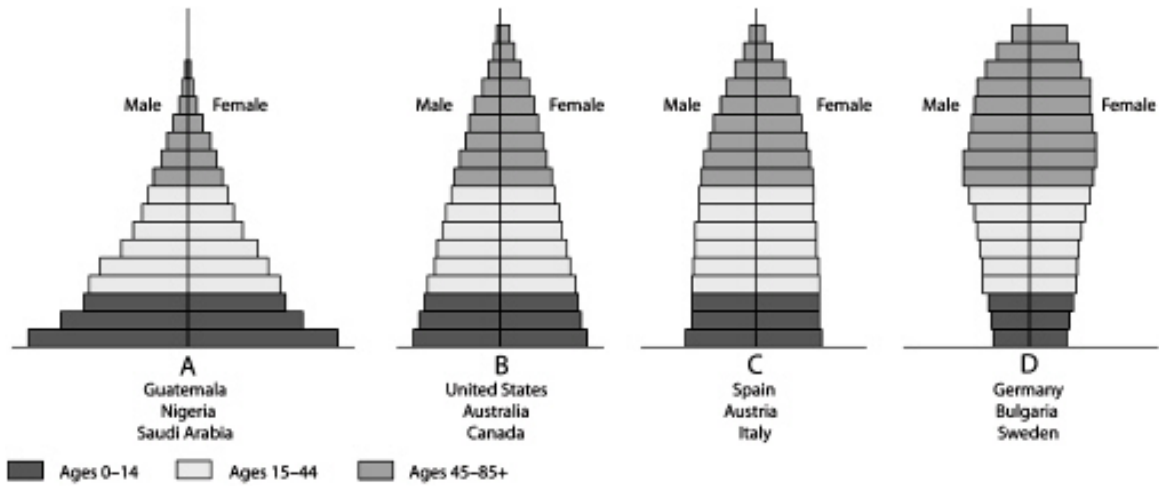


Total Fertility Rates for the United States

Use the Figure above to answer the following question(s).

What does the straight line running through the graph from left to right represent?

93.

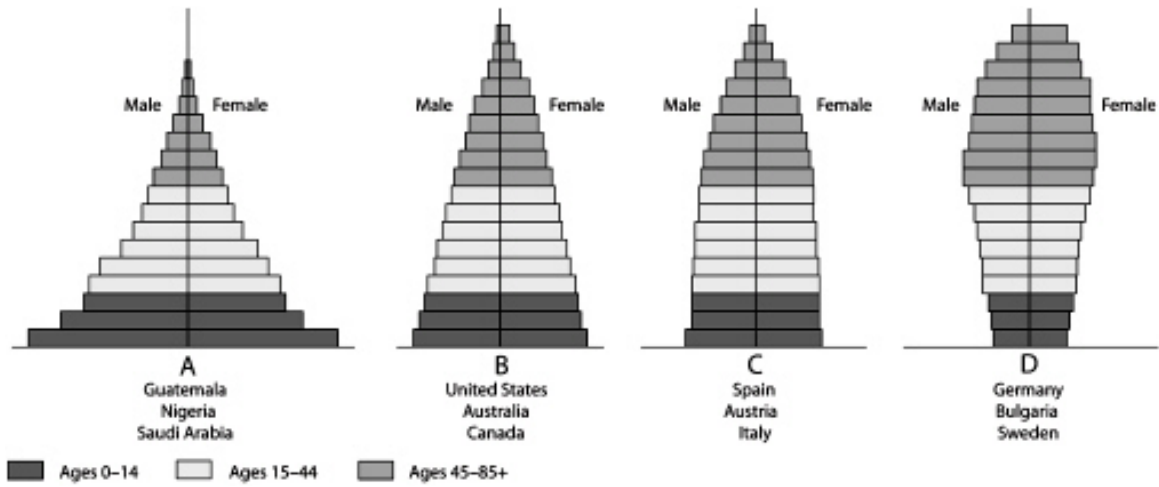


Generalized Population Age Structure Diagrams

Use the Figure above to answer the following question(s).

Which diagram has similar numbers of males and females in pre-reproductive and reproductive categories?

94.

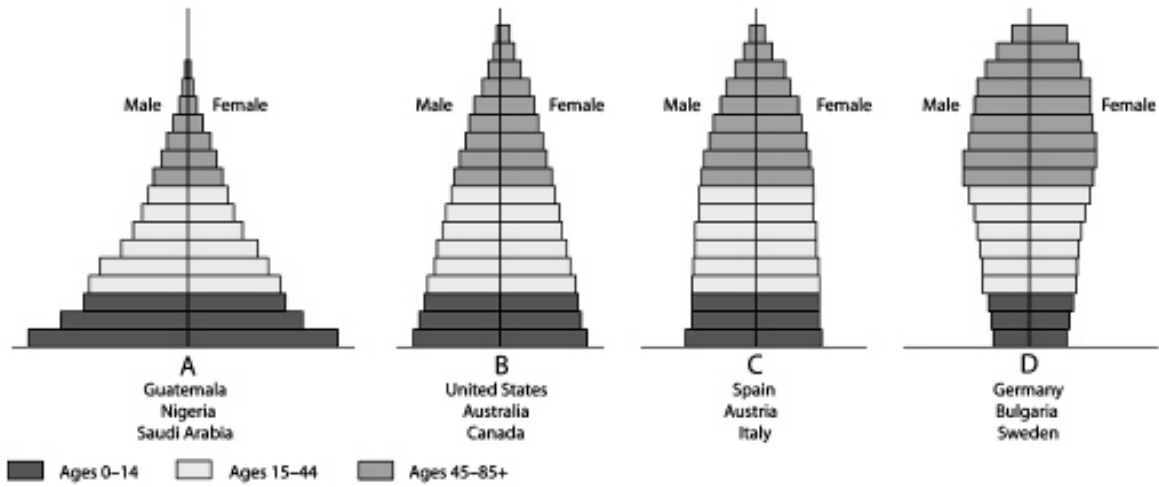


Generalized Population Age Structure Diagrams

Use the Figure above to answer the following question(s).

Which diagram has a strong likelihood of rapid population growth?

95.

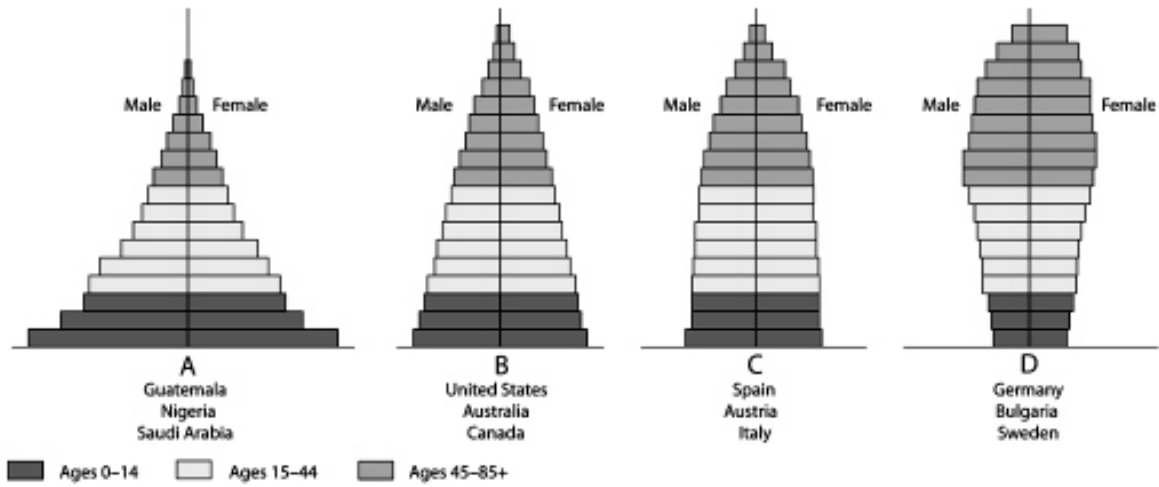


Generalized Population Age Structure Diagrams

Use the Figure above to answer the following question(s).

Which diagram shows a declining population?

96.

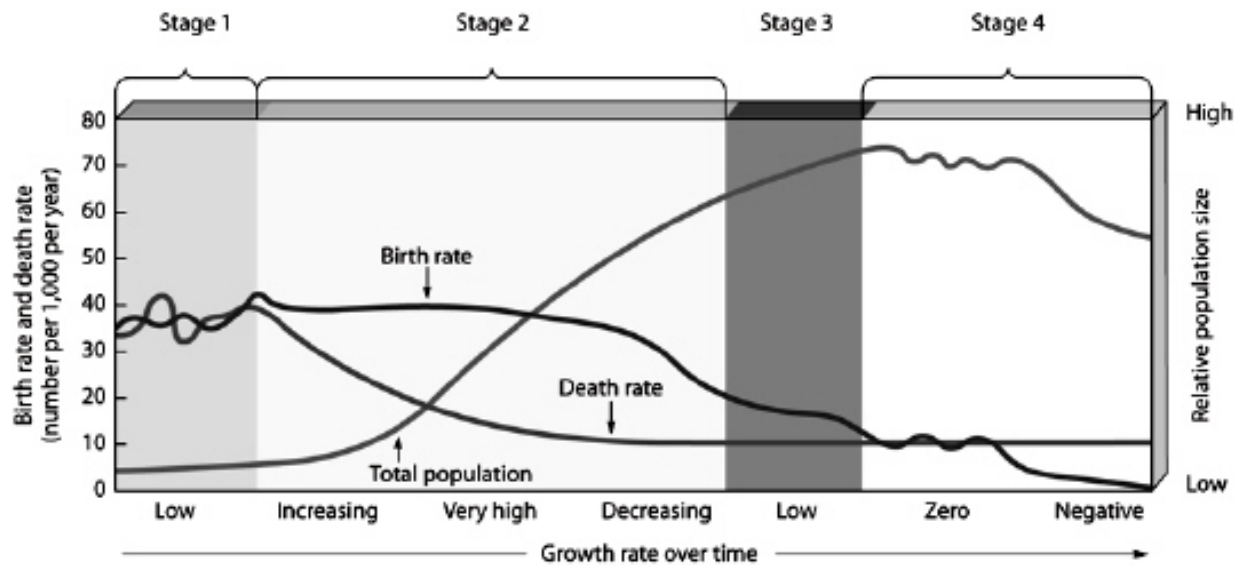


Generalized Population Age Structure Diagrams

Use the Figure above to answer the following question(s).

For the United States, Australia, and Canada, which gender is represented by the largest numbers in the later years of life?

97.

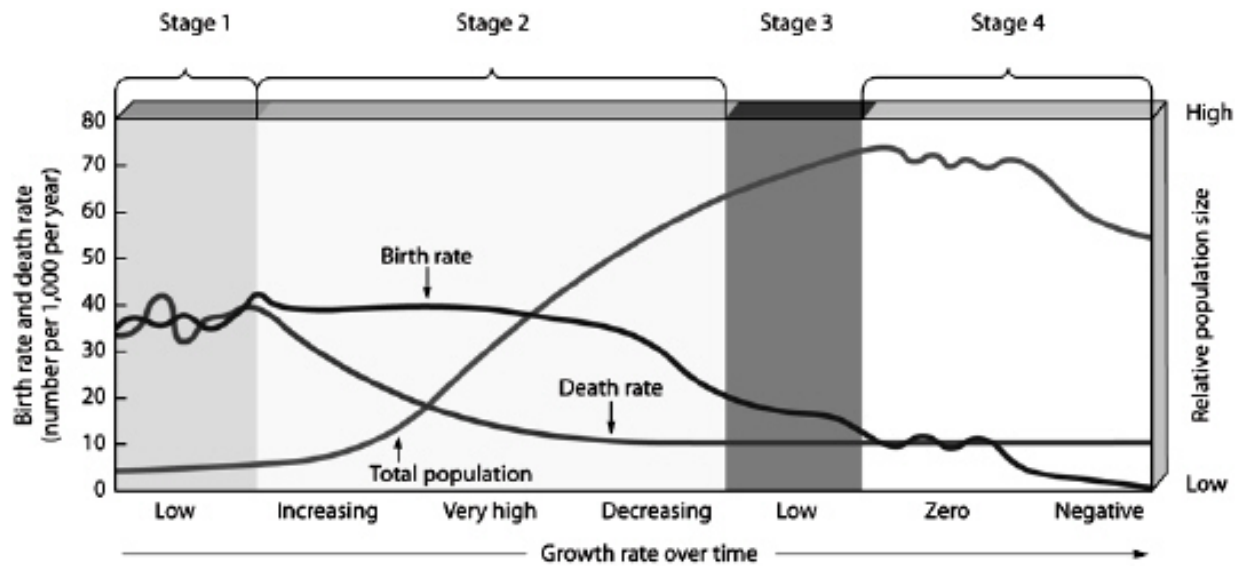


Generalized Model of Demographic Transition

Use the Figure above to answer the following question(s).

Choose the stage in which both birth and death rates drop and population growth slows.

98.

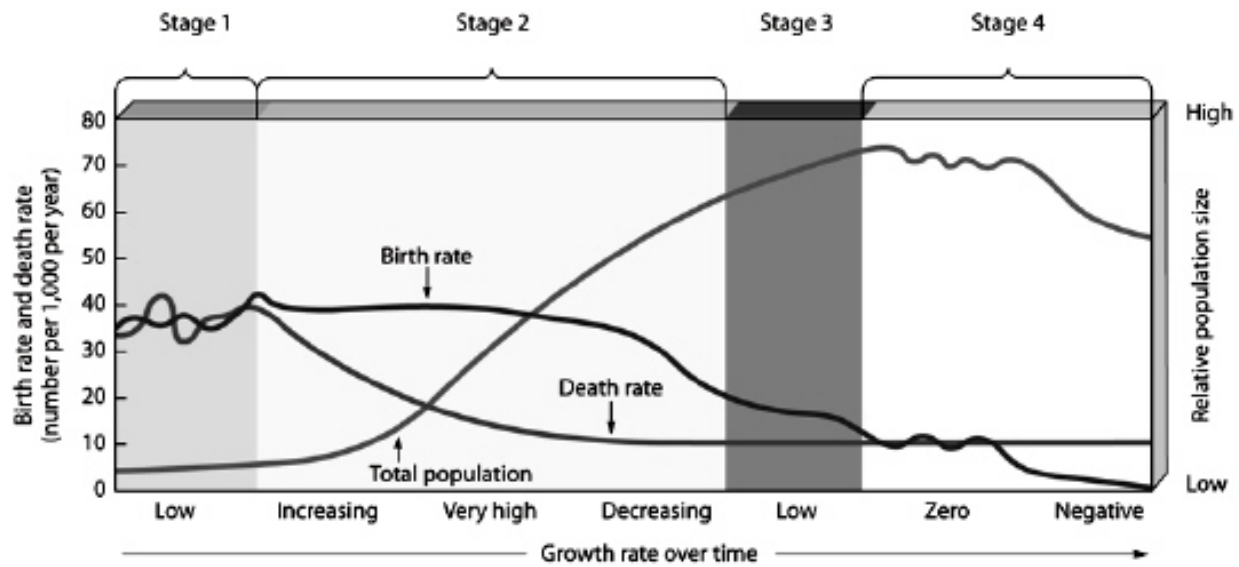


Generalized Model of Demographic Transition

Use the Figure above to answer the following question(s).

Choose the stage that has a high birth rate and a high death rate.

99.

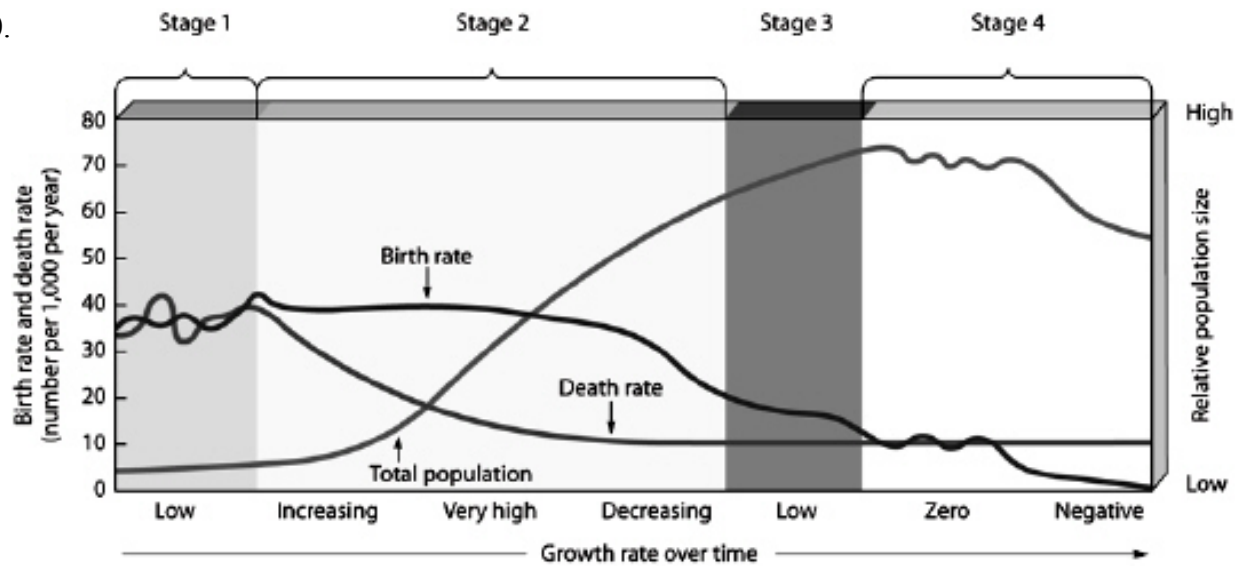


Generalized Model of Demographic Transition

Use the Figure above to answer the following question(s).

Choose the stage in which most countries experience zero growth rate.

100.

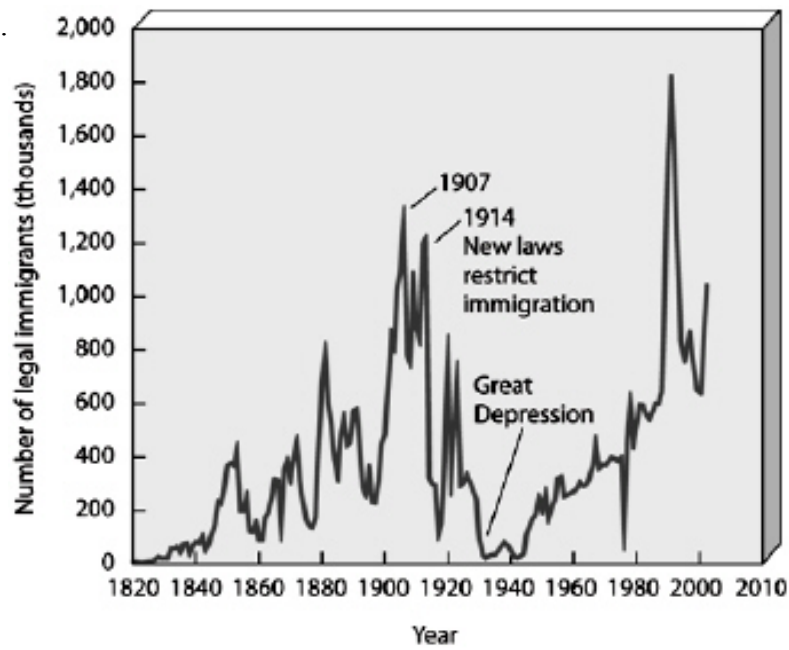


Generalized Model of Demographic Transition

Use the Figure above to answer the following question(s).

Choose the stage in which death rates decrease and birth rates are high.

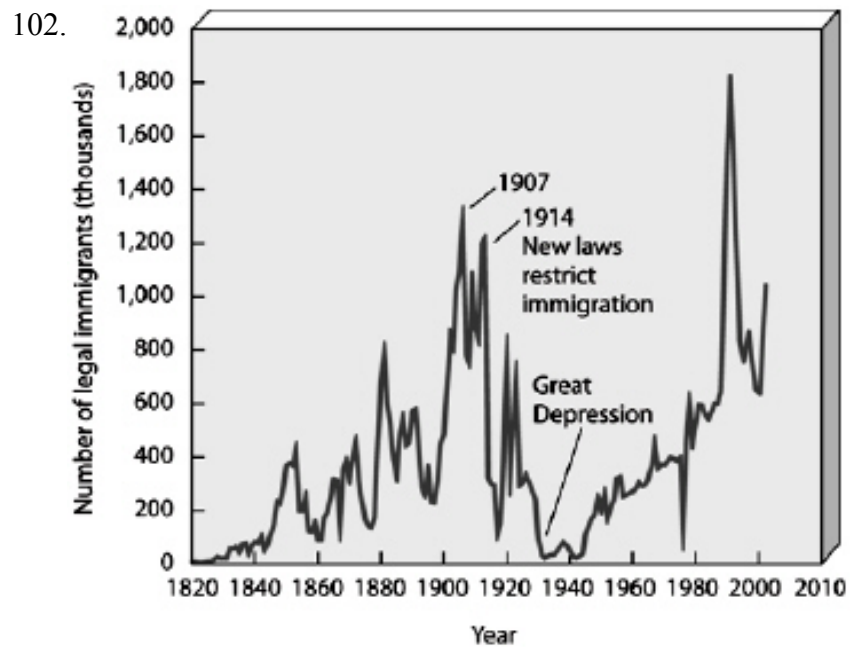
101.



Legal Immigration to the United States 1820-2003

Use the Figure above to answer the following question(s).

What are the two peak years for immigration into the United States?

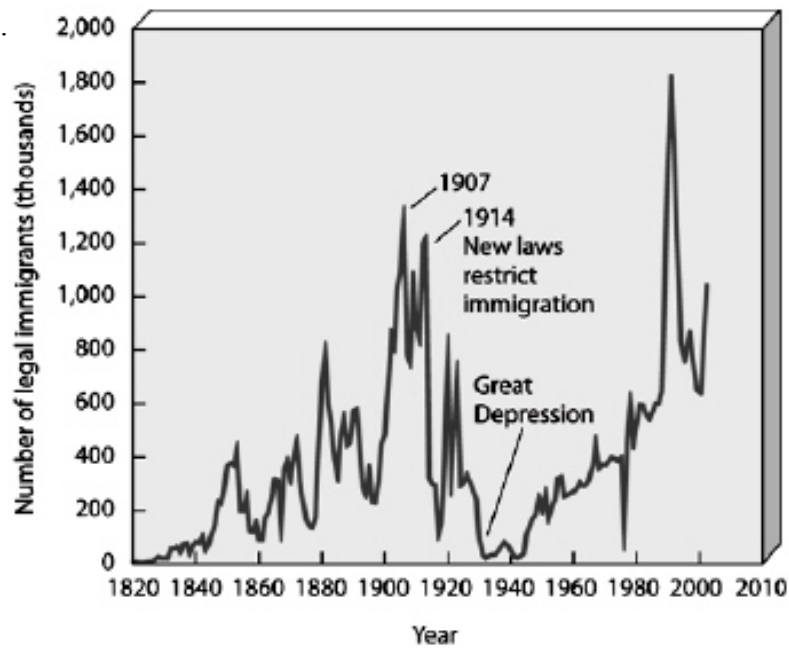


Legal Immigration to the United States 1820-2003

Use the Figure above to answer the following question(s).

Is immigration at its highest following the year 2000?

103.



Legal Immigration to the United States 1820-2003

Use the Figure above to answer the following question(s).

What period of time, since 1900, is represented by the lowest number of immigrants to the U.S.?

104. What are the implications of the phrase *optimal sustainable population*, considering the facts that: 1) 97 percent of future growth will come from developing countries, and 2) the environmental footprint of a population is dependent on the affluence of the population? Has the human population been able to achieve what it has achieved because only a small portion of the population is affluent? What will happen as more countries move from under-developed to developing and finally to developed?

105. Given the following formula:

$$\text{Population change} = (\text{Births} + \text{Immigration}) - (\text{Deaths} + \text{emigration})$$

How would you suggest we reduce the growth rate of the entire human population rather than the population of a country, or area?

106. The United States has one of the heaviest ecological footprints of any nation. We also have the fastest population increase of any developed nation. Does this combination of factors affect the ability of the United States to call for movement toward an optimal sustainable population?

107.If every woman on earth had no more than a total of two children during her lifetime, the world population would still increase for 50 years. Why is that?

108.Immigration is a volatile subject in many countries of the world, including the United States. However, analysts suggest the retirement of the very large baby boomer generation may result in a worker shortage in the United States. If the United States moves to reduce the number of immigrants into the United States, what will we do to supply the shortage of workers?

109.Put into your own words the events that occur in the demographic transition model.

110. Most of the factors that reduce the rate of growth of a population are focused on women. Why is this the case, and should we be concerned that men are seemingly left out of the equation?

111. Compare and contrast the efforts in India and China in regards to population control.

CHAPTER 6--THE HUMAN POPULATION AND ITS IMPACT **Key**

1. E
2. D
3. D
4. C
5. B
6. A
7. C
8. B
9. E
10. D
11. E
12. B
13. D
14. C
15. B
16. D
17. D
18. E
19. C
20. B
21. A
22. B
23. C
24. D
25. B
26. E
27. C
28. B
29. E

- 30. B
- 31. E
- 32. C
- 33. B
- 34. E
- 35. C
- 36. E
- 37. C
- 38. C
- 39. A
- 40. E
- 41. C
- 42. A
- 43. D
- 44. E
- 45. A
- 46. D
- 47. C
- 48. A
- 49. B
- 50. D
- 51. FALSE
- 52. FALSE
- 53. FALSE
- 54. TRUE
- 55. TRUE
- 56. FALSE
- 57. TRUE
- 58. TRUE
- 59. TRUE
- 60. FALSE
- 61. TRUE
- 62. FALSE
- 63. TRUE

- 64. FALSE
- 65. TRUE
- 66. FALSE
- 67. TRUE
- 68. TRUE
- 69. TRUE
- 70. FALSE
- 71. TRUE
- 72. TRUE
- 73. TRUE
- 74. TRUE
- 75. TRUE
- 76. in half *or* one-half *or* 50%
- 77. 83%
- 78. crude birth rate
- 79. crude death rate
- 80. decline; death rate
- 81. replacement-level fertility
- 82. baby boom
- 83. infant mortality
- 84. 42nd *or* forty second
- 85. triple
- 86. demographic momentum
- 87. young adults
- 88. 2
- 89. 1.6
- 90. 3/4ths *or* three-fourths
- 91. baby boom generation
- 92. replacement-level fertility
- 93. C
- 94. A
- 95. D
- 96. Females
- 97. Stage 3

98. Stage 1

99. Stage 4

100. Stage 2

101. 1907 and approximately 1986

102. No

103. Great Depression, 1929-1941

104. (page 125) *Optimal sustainable population* implies that there may be a "sustainable population" and an "optimal sustainable population." That optimal population may be smaller than the current population, with all the difficulties such as awareness might bring. If nature is called upon to trim the total population to an *optimal sustainable population*, those who would most likely be "trimmed" would be the most vulnerable: the elderly, the weak, the sick, the poor, and the very young. Those who would remain under such conditions would be the most affluent, those who have the heaviest environmental footprint. No easy answers are apparent.

105. Since humans are not able either to immigrate from another planet, or emigrate to another planet, we are left with two options for reducing the growth rate or the total size of the population. First, we can reduce the birth rate. Second, we can increase the death rate.

106. Other nations may very well be reluctant to heed the calls for self-control and reduction of the environmental impact of populations given these facts. Reduction of our ecological footprint may be obtainable if we apply ourselves to the problem. Reduction of population size will be more difficult given the broad scope of opinion about reproduction that exists in the country.

107. The number of girls who are pre-reproductive, which is who have not begun to reproduce, is larger than the number of women who are reproducing. Even if each pre-reproductive girl only had two children during her reproductive years, the momentum of the number of girls will keep the population increasing until the size of pre-reproductive people and reproductive people is equal.

108. Highly subjective. Look for being on subject, along with coherency and clarity. Idea is to motivate thought and discussion about difficult issues.

109. (pages 133-134)

Stage 1 $\frac{3}{4}$ growth is slow because births are nearly compensated for by deaths. Population has not reaped the benefits that accompany industrialization.

Stage 2 $\frac{3}{4}$ birth rates remain high but death rates drop because of better food and health care. Population grows quickly.

Stage 3 $\frac{3}{4}$ population stabilizes as benefits of industrial society, such as improvements in food, education, and health care cause both birth and death rates to drop.

Stage 4 $\frac{3}{4}$ population declines as continued drop in birth rates fall below replacement value.

110. Somewhat subjective. Studies are clear that addressing the needs of women works to reduce population growth. The manner in which this is accomplished is also clear. It is also a fact that in most societies men are the primary leaders. As such, they have provided for their own care, education, and advancement. Women have most often been left out of the benefits of society and therefore must be the focus of efforts to reduce population growth.

111. China has taken an aggressive stance in attempting to reduce population growth. India has taken a more passive approach. China is more centralized in power, leadership, and direction. India is more scattered, and is a democracy. China's carrot and stick approach has been applied broadly, though it has been more successful in urban centers. China's Total Fertility Rate is about 1.6, while India's is about 2.9.