

Human Geography: Population Pyramids & Demographic Transition



Name: _____ Date: _____

Part A: Demographic Analysis. Evaluate population data and answer the human geography questions below.

1. A developing country exhibits an expansive 'Christmas-tree' shaped population pyramid with a broad base of young children and a rapidly tapering apex. What demographic reality does this shape indicate?

- A. Low birth rates and an exceptionally long average life expectancy
- B. High crude birth rates (CBR) and high infant mortality, characteristic of rapid population expansion (Stage 2 DTM)
- C. A negative population growth rate where deaths exceed births
- D. High rates of elderly retirement immigration from other nations

2. In Stage 4 of the Demographic Transition Model (observed in post-industrial nations like Japan, Germany, and Italy), what trend occurs regarding birth and death rates?

- A. Birth rates skyrocket while death rates plunge
- B. Both birth rates and death rates stabilize at low levels, resulting in near-zero or stationary population growth
- C. Epidemic diseases cause massive spikes in crude death rates
- D. Infant mortality increases due to lack of modern hospitals

3. Which societal challenge is MOST directly triggered when a nation develops a high elderly dependency ratio (an inverted urn-shaped pyramid with more retirees than working-age citizens)?

- A. Severe shortages of elementary schools and pediatric physicians
- B. Strained pension systems, rising healthcare costs, and labor shortages in the domestic workforce
- C. Immediate overpopulation leading to widespread famine
- D. Uncontrolled urban sprawl driven by high fertility

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Part B: Demographic Transition Model (DTM) Stages. Categorize each societal description into the appropriate DTM Stage.

Sort these items: Industrializing; death rate drops precipitously due to clean water and sanitation while birth rate stays high; Urbanizing; fertility rate drops significantly as women gain educational and career opportunities; Post-industrial; sub-replacement fertility (TFR < 2.1) leading to an aging society and shrinking natural workforce; Expansive pyramid with high youth dependency ratio (e.g., Sub-Saharan Africa); Birth rates decline to match low death rates; column-like stationary population pyramid; Family sizes decrease as agricultural child labor becomes less economically necessary in cities

Stage 2: Rapid Expansion	Stage 3: Moderate Growth	Stage 4 / 5: Stationary / Declining