

The dependency ratio is a measure used to indicate the ratio of people in the "dependent" ('non-working, unproductive') ages (under 15 and ages 65 and older) compared to 100 people in the "economically productive" ages (15–64 years of age). The formula for the dependency ratio is:

$$\frac{\% \text{ Population under age 15} + \% \text{ Population age 65+}}{\% \text{ Population ages 15-64}} \times 100$$

$$\frac{20 + 13}{67} = 49$$

The dependency ratio for the U.S. is 49:100.

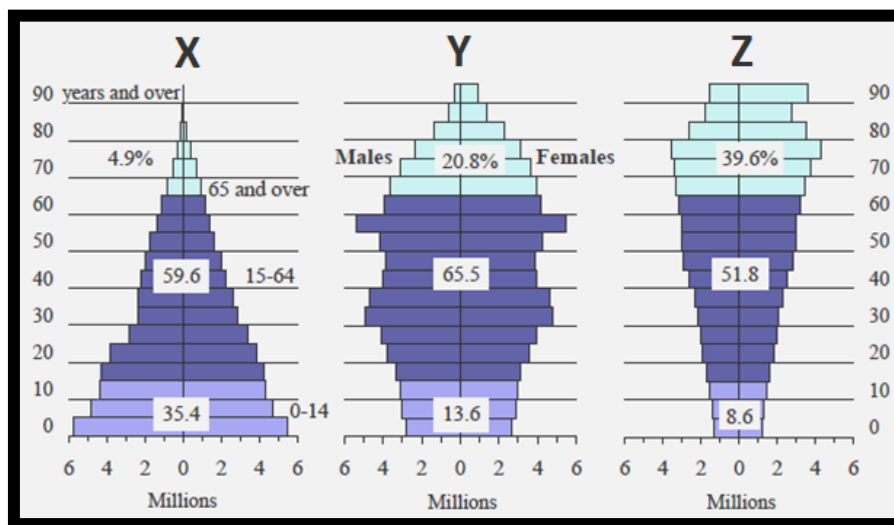
This means that there are 49 "dependent" people for every 100 "working" persons in the United States.

The (total) dependency ratio can be decomposed (disaggregated) into the child dependency ratio:

$$\text{Child dependency ratio} = \frac{\% \text{ number of people aged } 0 - 14}{\% \text{ number of people aged } 15 - 64} \times 100$$

AND the aged dependency ratio:

$$\text{Aged dependency ratio} = \frac{\% \text{ number of people aged } 65 \text{ and over}}{\% \text{ number of people aged } 15 - 64} \times 100$$



Based on the above, calculate the overall, youth and aged dependency ratio for the ACTUAL (REAL LIFE, PRESENT DAY) countries represented by population pyramids X, Y and Z:

Region	% pop < 15 (A)	% pop > 64 (B)	Total % dependent (A) + (B) = (C)	Productive population % (1 - C)	Overall Dependency ratio	Child dependency ratio	Aged dependency ratio
World	26	8	34	66	51:100	39:100	12:100
MDCs	16	16	32	68	47:100	23:100	23:100
LDCs	29	6	35	65	54:100	45:100	9:100
Country X							
Country Y							
Country Z							

According to the table you completed

1. What stage of the Demographic Transition Model (DTM) would you find country X? _____ Y? _____ Z? _____
2. In which country is the pressure to provide for nonproductive citizens the highest? _____
3. Which country has the “healthiest” (or lowest) overall dependency ratio? _____
4. Which country has the highest “aged dependency” ratio? _____
5. What socio-economic problems do regions with higher “aged dependency” ratios experience, be sure to provide specific examples to further explain your ideas (see Rubenstein p 59 – 60 and AP Crash Course p 42)?

6. Which country has the highest “child” or “youth” dependency ratio? _____
7. What socio-economic problems do regions with high “child” or “youth” dependency ratios experience (see Rubenstein p 59 – 60 and AP Crash Course p 42)?

8. Explain the “demographic trap” (google and read the Wikipedia explanation, it is acceptable. Or use the notes from my lecture, but answer the question in your own words in paragraph form without diagramming it. Make sure your answer reflects the “circular” nature of the trap otherwise it is incomplete).