

Exercise on the CDR, CBR, e_0 , and TFR (due in class, Tuesday Sept 8th)

Write out the following acronyms:

e.g. UCB=University of California, Berkeley

CDR=

CBR=

TFR=

e_0 =

Answer the following questions in a sentence or two; show your calculation work on this or a separate sheet of paper.

Question 1: Calculate the CBR for 2003 for the fictitious country Xanadu from the information below:

Births	Number
All births to women of any age in 2003	700,000
All births to women age 20-45 in 2003	670,000
All female births to women of any age in 2003	340,000

Population	
End of year population	51,000,000
Total (men and women) mid-year population	50,000,000
Mid-year population of women only	27,000,000
Mid-year population of women age 20-45	16,000,000

Question 2: Why is the CDR a “crude” rate? In other words, in which sense does the CDR not give a satisfactory measure of the level of mortality?

Question 3: What does the following sentence mean: “Life expectancy (e_0) in the U.S. in 2000 was 77.1 years”?

Question 4: In what way is life expectancy a better measure of the level of mortality than the CDR?

Question 5: What does the following sentence mean: “The TFR in the U.S. in 2000 was 2.1”?

Question 6: In what way is the TFR a better measure of the level of fertility than the CBR?

Question 7: Calculate the age-specific fertility rates for women in Togo in 1961 using the data below:

Age of women	Number of women	Deaths to women	Births to women
10-14	60,153	309	0
15-19	48,564	578	7,150
20-24	67,096	502	21,910
25-29	80,746	1,034	25,305
30-34	53,670	659	14,825
35-39	51,975	638	9,935
40-44	32,022	441	3,625
45-49	32,307	638	1,420
50-54	20,478	431	0

Question 8: Calculate the TFR from the data in Question 7.