This review sheet is intended to cover everything that could be on the exam; however, it is possible that I will have accidentally left something off. You are still responsible for everything in the chapters covered except anything that I explicitly say you are not responsible for. Therefore, if I left something off of this sheet, it can still be on the exam. There will be no multiple-choice questions. Most of the questions will be like the ones in the homework assignments, and possibly a few definition questions, but I am more likely to ask questions that make you use the definitions rather than recite them. I will probably ask one of the questions from the book at the end of the chapters.

The review session will be at a time and to be determined, but probably Monday 2/12.

Chapter 1: What is development? How do we catagorize countries into "**low-income**", "**lower-middle-income**", "**upper-middle-income**", and "**high-income**" countries? What do the terms, *transitional economy*, *third world*, *North-South*, and *emerging economies* mean? Why shouldn't we make generalizations about developing countries?

Chapter 2: What is meant by **PPP** and how do we use it to calculate **real GNI per capita**? How does **GNI** and **GDP** differ? What is **NEW**? What is the **HDI**? I will provide you the following numbers: Maximum income per capita is $75,000, minimum income per capita of 100, maximum life expectancy is 85, minimum life expectancy of 20, maximum mean years of schooling is 15, and maximum expected years of schooling is 18. (Source: http://hdr.undp.org/sites/default/files/hdr2018_technical_notes.pdf, Page 2) Why did we create it? I.e., why not use GNI as a measure of how well off a country is? Be able to calculate it. Why is the **Gender Inequality Index (GII)** important? For the **MDGs**, be able to come up with a method to achieve that goal and why it is a goal. In general, which are we close to achieving? *I will not ask you to list them.*

Chapter 3: What is required for economic **growth**? Why do small changes in rates of growth make a big difference to the doubling time? Be able to calculate **present value**. *Set up a table with each column being a different year. Then convert all numbers to PV by using the formula $PV = FV_n/(1+i)^n$ where n is the number of years in the future the payment is.* Why do we need **factor accumulation**, **increased efficiency**, **saving**, and **technology change**? Know why the **production function diagram** is drawn as we drew it. For the Solow residual, understand that it assumes the items on **Page 65** and the **growth of TFP** equation on Page 68. Be able to calculate the **TFP**. For the *Characteristics of Rapidly Growing Countries*, know why those characteristics help the economies grow faster. Except for #6, *Favorable Geography*, know what the government can do to fix the problem. What happens to the proportion of different types of production economy as it grows? *I will not ask you to list them.*

Chapter 16 only Pages 583 - 603: Know what is meant by *diminishing returns, labor surplus, underemployment, disguised unemployment, marginal product of labor (MPL)*, and *average product of labor (APL)*. Be able to do the **two sector model of labor supply/demand.** Note that I added a second vertical axis and the distance from that axis, leftward to the intersection is the amount of labor in the rural farming. The bottom graph on Page 596 is not easy to use and not necessary if you have the second vertical axis. For increases in the population, you should be moving the right-hand axis. Why are the workers paid MPL or APL depending on where they work?   Be able to move the diagram around both with and without the subsistence wage. *Hint: for the APL_A, it is backwards because the axis is reversed. So, an increase is up/left.*

Chapter 5: What is meant by th **big push** and what are its advantages and disadvantages? How do

backwards linkages help an economy? What are the strengths and weaknesses of using **Pareto efficiency** (and **Pareto optimality**) and **MSB = MSC** to determine if an action is a good one? What are **market failures**? Understand why the 10 items in the **Washington Consensus** are important for economic development. Understand why some economists feel that **liberalization of FDI** may not be good. Why is the transition from a **command economy** to a market economy be difficult? Understand why we need the **5 Key Elements for a Market to Work Well** on Page 149. What are the advantages and disadvantages of **hard governments** and **soft governments**?

Chapter 6: What is meant by **frequency distribution**? Be able to draw a **Lorenz Curve** and estimate the **Gini Coefficient**. Understand what **deciles** and **quintiles** are. What is the problem of too large or too small Gini Coefficient? What is the **Kuznets Curve**? Why might it take that shape? What is meant by *absolute poverty*? What are the two most common values chosen for that? Why do some people disagree about them? Be able to calculate the *poverty gap*. Know what that means. Is growth good for the poor? What can be done to help the poor more with growth? What are **conditional cash transfers**? What are **safety nets**?

Chapter 7: What are *crude birth rate* and *crude death rate*, and how do they relate to the *rate of natural increase*? Why does the *demographic transition curve* often look like the one they drew for Finland? What is the *total fertility rates*? What causes it to change? Why is a 2% growth rate a big problem? What is *population momentum* and how does it cause populations to continue to grow after the fertility rate equals the replacement rate? What did **Malthus** say? What were the strengths and weaknesses of his theory? Understand how the five items on Page 234 affect the fertility rate. How does faster population growth hurt development? What is the *dependency ratio* and why does it matter? Understand the **age distribution graphs, aka population pyramids,** on Page 239. What are the arguments of the *population "optimists."* What are the strengths and weaknesses of their theory? What can be done to reduce the population growth? What are the strengths and weaknesses of the various approaches?

Non-graded Homework #4A to be reviewed with Homework #4.

1) (15 points) Go to https://www.indexmundi.com/kenya/age_structure.html and explain to me why the population pyramid looks as drawn.

2) (15 points) Explain why the birth rate decreases after the death rate.

3) (20 points) The Republicans are proposing that welfare payments have restrictions attached to them. Given what our book says, what do you feel would be the best conditional requirement to put on the payments. Explain how the condition would work and why it would have good results. (I realize that I am implicitly stating that the USA is a developing country.)

4) (20 points) If you were the head of a country like Syria, which has a large population growth rate of 4.83%. What would you do to reduce it? Explain how that would reduce the problem.
https://worldpopulationreview.com/

5) (15 points) Assuming your actions in your answer to Question #4 work, the population of the country would still have an increase in the population for a couple of more decades. Why?

6) (15 points) Explain why fertility rates are higher in countries where it is common for young children to work.