

Chapter 5: Questions on Mortality

1. Life expectancy at age T , average further years lived from that age, is denoted by e_T . Can we have a society in the Malthusian era where $e_{20} > e_0$? Explain.
2. What was typical life expectancy at birth for hunter-gatherers, Europeans around 1800, and East Asians around 1800?
3. Life expectancy at age 20 seems to be about 40 for hunter gatherers. This is higher than for pre-industrial Europe or Asia. What explains this?
4. Suppose the pattern of life expectancy in two societies was

	e_0	e_{20}
Society A	30	40
Society B	38	32

Which society should we prefer to live in?

5. In the Malthusian era life expectancy at birth is driven by the birth rate. The birth rate in hunter gatherer societies averages 30 per 1000. What is the implied life expectancy?
6. What two sources in pre-industrial England show that life expectancy at birth rose with income?
7. Pre-industrial England and the Netherlands were rich compared to Japan in the years 1700-1800. What are the most likely reasons for this?
8. How can we estimate the inherent mortality rates of different climate zones around the world in the pre-industrial era? What were the safest and most dangerous places for humans?
9. Tahiti pre-1800 had one of the most benign climates in the world in terms of disease. What should that have done to living standards? How did Tahitians manage to attain material living standards as high as those in England?

10. Without Polynesian-style sources of mortality, what happened to the population of Pitcairn Island in the 19th century.

11. The Black Death raised incomes in Europe for 300 years. When Europeans arrived in the Americas they brought a variety of diseases the indigenous Americans had no immunity to, leading to drastic declines in native populations – White Death. Why did this not similarly improve living standards of indigenous peoples in the Americas?