$C \rightarrow Q$ Notes $(\operatorname{Mod} 7)$
Name:
Consider the side-by-side boxplots below and draw comparisons using median based statistics. Think about SOCS in your analysis. If you need a place to start, begin by listing SOCS observations. Then look at the quartiles, median, and IQR of each graph.
(1) Class heights for Math 200 S18:

(2) Hours budgeted for class for Math 200 S18:

(3) Hours of work (per week, outside of class) for Math 200 S18:

(4) The following table reports life expectancy at birth, in years, for two countries in the developing world for selected years between 1987 and 2007: Botswana in southern Africa and Papua New Guinea in the southwestern Pacific Ocean. (Data were obtained from the Google Public Data service; original data is from World Bank's World Development Indicators.)

| Year | Botswana | Papua New Guinea |
| :---: | :---: | :---: |
| 1987 | 63.5 | 53.9 |
| 1990 | 63.0 | 55.0 |
| 1992 | 62.7 | 55.7 |
| 1995 | 56.6 | 56.2 |
| 1997 | 52.5 | 56.5 |
| 2000 | 48.9 | 56.8 |
| 2002 | 46.5 | 56.9 |
| 2005 | 49.0 | 57.2 |
| 2007 | 50.6 | 57.4 |



Using both the table and corresponding boxplots, comment on the disparities in life expectancy between the two countries. Offer some conjectures about what might explain the different distributions.

