

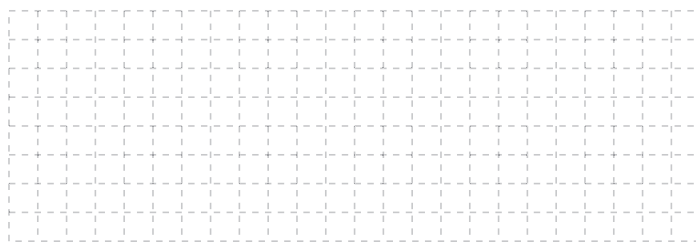
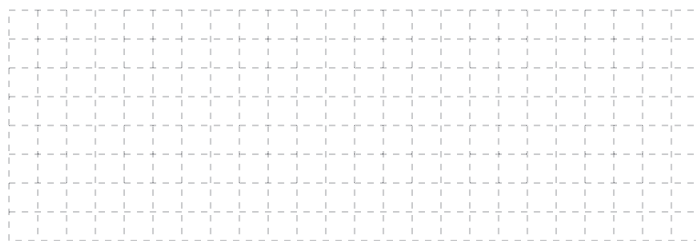
YOU MAY USE A CALCULATOR TO COMPUTE SOLUTIONS BUT SHOW YOUR SET-UPS.

Show all relevant work!

- ① 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

- (a) Ignoring the year information for now, create dotplots (using the same scales) for the distributions of these life expectancies.



- (b) Comment on how the distributions of life expectancies compare between these two countries. In particular, which country has less consistency (larger spread) in its life expectancies across this 20-year period? Discuss what this observation indicates in this context.
- (c) Find the five number summary for both sets of data and construct boxplots above the dotplots.
- (d) Use technology to find the mean and standard deviation for both sets of data.