

## Life Expectancy

- a. Report the largest and smallest life expectancy values for Great Country, and calculate the difference.

Largest: **75**

Smallest: **55**

Difference: **20**

- b. Report the largest and smallest life expectancy values for Super Country and calculate the difference.

Largest: **95**

Smallest: **42**

Difference: **53**

Life expectancies in two countries (years)

Year	Great Country	Super Country
1940	55	42
1950	62	49
1960	64	55
1970	65	68
1980	69	65
1990	71	82
2000	72	79
2010	73	89
2020	75	95

- c. Which country has the larger range? **Super Country**
- d. Determine the lower quartile of life expectancies for Great Country:  
(the median of the four values BELOW the median) **63**
- e. Determine the upper quartile of life expectancies for Great Country:  
(the median of the four values ABOVE the median) **72.5**
- f. Determine the interquartile range (IQR) for Great Country:  **$72.5 - 63 = 9.5$**

- g. Determine the lower quartile of life expectancies for Super Country:  
(the median of the four values BELOW the median)  $(55+49)/2 = 52$

<u>Super Country</u>
<u>42</u>
<u>49</u>
<u>55</u>
<u>68</u>
<u>65</u>
<u>82</u>
<u>79</u>
<u>89</u>
<u>95</u>

- h. Determine the upper quartile of life expectancies for Super Country:  
(the median of the four values BELOW the median)  $(82+89)/2 = 85.5$

- i. Determine the interquartile range (IQR) for Super Country:  $85.5 - 52 = 33.5$

- j. Which country has the larger IQR? **Super Country**