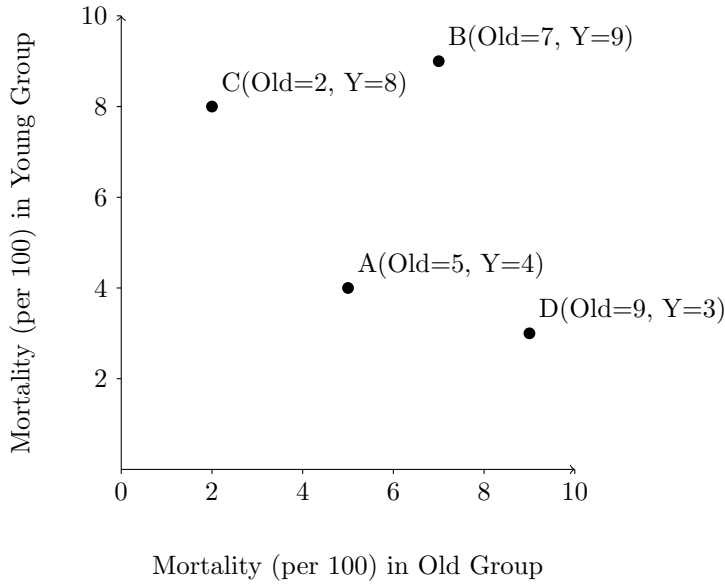


## Math 125: Epidemiology

### In-Class Activity: Standardization & Age Adjustment

The graph shows some imaginary mortality statistics for several countries. For the sake of simplicity, the age-dependence of mortality is reduced to just two groups: young people age 40 and below, and older people age 41 and above.



1. Calculate the overall mortality **rate** (per 1000) in each country. Assume that the populations are as follows:

Country	Old	Young
A	200	800
B	100	900
C	600	400
D	400	100

Population

Write down the countries in order from best to worst.

2. Calculate an age-adjusted mortality rate for each country. Take this as the standard population

Country	Old	Young
Standard Pop.	400	600

Write down the countries in order from best to worst.

3. Calculate years of potential life lost in each country. For the sake of the calculation, assume that the typical age of the young people is 20 years, versus 60 years for the older people. Use 65 years as the reference age.

Write down the countries in order from best to worst.