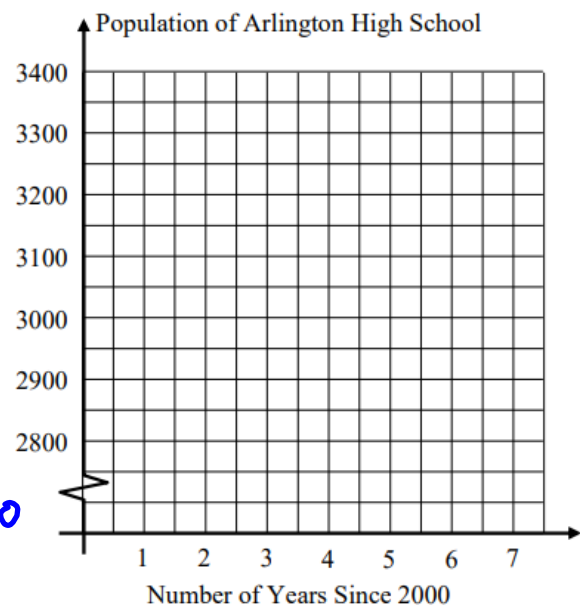


1. The table below shows the number of students in Arlington High School as a function of the number of years since 2000.

Number of Years Since 2000, x L_1	2	3	4	5	6
Number of Students at Arlington High School, y L_2	2892	3042	3087	3136	3296

- (a) On the grid below, draw a scatterplot of the data.



- (b) Determine an equation, using your calculator, for the line of best fit. Do not round your coefficients.

$$y = 90.2x + 2729.8$$

- (c) Define below what each variable represents:

x represents: L_1 # of years since 2000

y represents: L_2 # of students

- (d) Use your model to predict the population of Arlington High School in the year 2012. Round your answer to the nearest whole number.

$$y = 90.2(12) + 2729.8$$

$$y \approx 3812 \text{ students}$$

$$x = 12$$