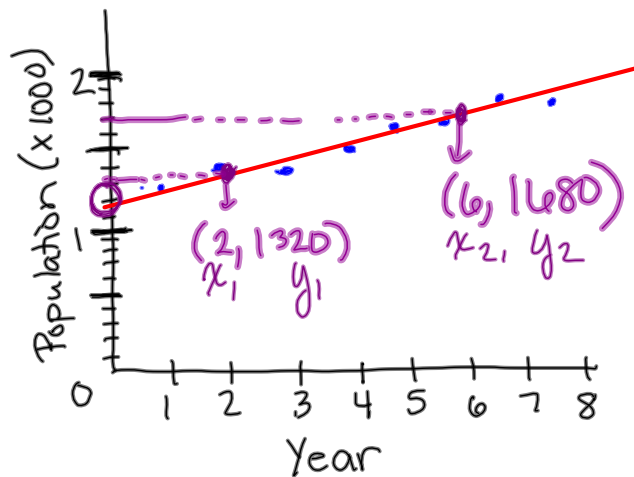


Deer Population Study

x Year	y Population
1	1260
2	1375
3	1310
4	1490
5	1625
6	1680
7	1740
8	1715



$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{1680 - 1320}{6 - 2} = \frac{360}{4} = 90$$

$$\begin{matrix} (6, 1680) \\ x_2, y_2 \end{matrix}$$

$$y - y_1 = m(x - x_1)$$

$$y - 1680 = 90(x - 6)$$

$$y - 1680 = 90x - 540$$

$$\begin{array}{r} y - 1680 = 90x - 540 \\ +1680 \qquad \qquad +1680 \\ \hline y = 90x + 1140 \end{array}$$

Estimate the deer population in the 12th year of the study.

$$x = 12$$

$$y = 90(12) + 1140$$

$$1080 + 1140$$

$$y = 2220$$