

1. What is the equation of the line through the points $(5, -1)$ $(2, 8)$?

2. What is the equation of the line through the points $(5.1, 6.2)$ $(4.1, 66.5)$?

The population of a city is 124,000 in 1930 (year 0), and the population of this city is 85,000 in 2000 (year 70).

3. Model the population (y) of the city by the year after 1930 (x) using the information above to form a linear equation.

4. Using your model, predict the population of this city in 2015.

5. What is the equation of the line through the point $(4, 5)$ parallel to the line $3x - 12y = 17$?