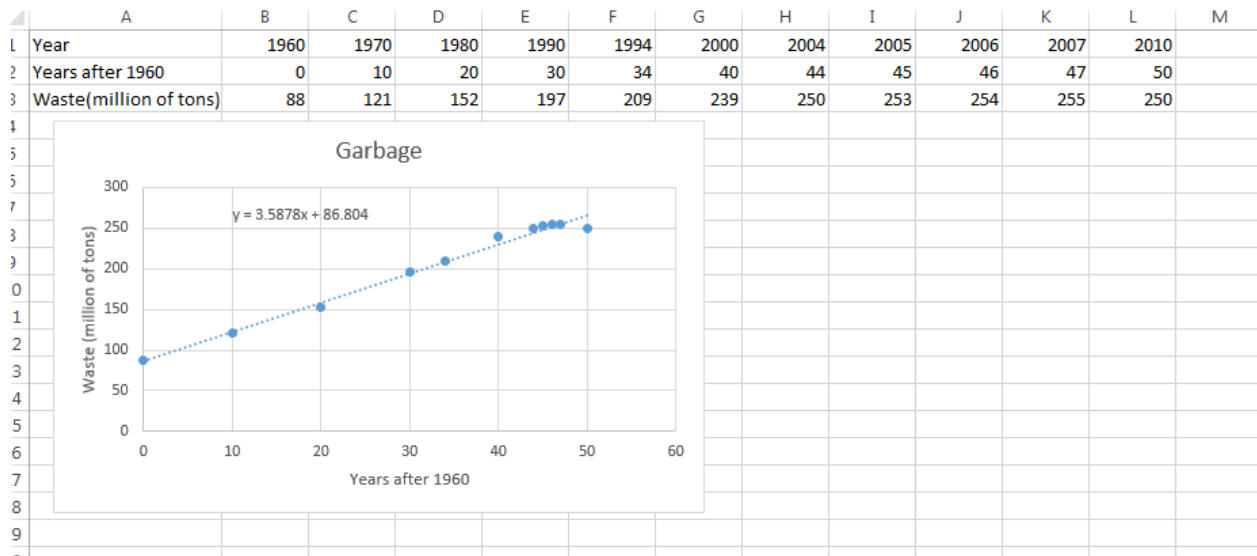


Activity 4



4. Rate of change should be about 3.6 million tons per year

5. The horizontal intercept would be the solution to $0 = 3.6x + 86$ or $x = -24$ meaning in 1936 there would be no garbage. This is basically meaningless. The model breaks down.

6. a) In 2010 we would have $3.6 \cdot 50 + 86 = 266$ million tons.

b) Not particularly close. People seem to be reducing waste either by using less or recycling. Perhaps the population is also growing at a slower rate?

c) In 2020 we would have $3.6 \cdot 60 + 86 = 302$ million tons of garbage. We reduction in waste, I don't think this is an accurate prediction.