

7. Compare your linear function with that of another student or group.

Comparison function: $f(x) = \frac{5}{11}x + \frac{151}{11}$

Is the comparison function the same as the function you wrote down for part 3?

No, they are not the same.

If they are different, explain why.

They are slightly different due to the plot points that were chosen. The slopes are $0.5 \approx 0.45$, while the y-intercepts are $12.5 \approx 13.72$.

If they are the same, explain why.

8. In actuality, using a linear growth model for population is not common. Most models are exponential models, due to the fact that most populations experience relative growth, i.e. 2% growth per year. Linear models for nonlinear relationships like population work only within a small time frame valid close to the time of the data modeled. Discuss some of the false conclusions you might reach if you use your linear model for times far from 1980-2008.

If you were to continue using a linear model for nonlinear relationships such as population, I suspect there could be miscalculations in city development, suburban construction, and projected job growth.