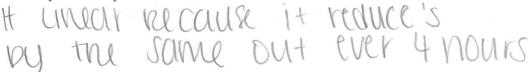State whether each relationship can be modeled with a linear function or an exponential function and justify your choice. Note: You do not need to write the function

1. The relationship between the distance driven and the charge when a taxi driver charges $2.50 for the first mile and $1.50 for each additional mile.

    Exponetial function because it's going to more on the first one and 1.50 on the rest of them

2. The relationship between the number of bacteria and time when a culture of 6000 bacteria is reduced by 50% every 4 hours.

    It Linear because it reduce's by the same out ever 4 hours

3. The relationship between the volume of a landfill and time when the volume doubles every three years.

    linear because it doubles every 3 years.

4. The relationship between the altitude of a hot air balloon and time when the hot air balloon takes off at 5500 feet above sea level and rises 120 feet every minute.

    Exponetial because the balloon rises.