⑲

Start
1991

$$y = Ce^{kt}$$

$$834000 = 200,000\, e^{6x}$$

Solve the problem.

19) During 1991, 200,000 people visited Rave Amusement Park. During 1997, the number had grown to 834,000. If the number of visitors to the park obeys the law of uninhibited growth, find the exponential growth function that models this data.

$$y = 200,000\, e^{.2380x}$$

20) A culture of bacteria obeys the law of uninhibited growth. If 140,000 bacteria are present initially and there are 609,000 after 6 hours, how long will it take for the population to reach one million?

Starting

$$y = Ce^{kt}$$

$$609000 = 140000\, e^{6k}$$