Unit 10 Discussion Example – Post 2: Reply to a Classmate

Hi Classmate!

- Your equation population model for King County, WA:

  $$P(t) = 1{,}737{,}081 \times e^{0.0106\,t}$$

  The current year is 2020, so t = 20.

- $P(20) = 1{,}737{,}081 \times e^{(0.0106 \times 20)}$
  $P(20) = 1{,}737{,}081 \times e^{(0.212)}$
  $P(20) = 1{,}737{,}081 \times e^{(0.212)}$
  $P(20) = 1{,}737{,}081 \times 1.2361$

  P(20) = 2147289.0044 or rounded to 2,147,289 people

- A quick search on Google showed the population in 2019 for King County, WA to be

  $2{,}252{,}782$ people. My number is 2.15 million, so your model only slightly underestimated the population in 2019/20.