Primary Research Question

What model best describes the first decade of internet usage (1990-1999) in the United States? Which model is the best long-term fit?

Conduct the Analysis in R

1. Type or copy the script from the Prepare for the Analysis section into the Script window of R.
2. Select the portion of the code you wish to run, then press "ctrl+ enter."
3. Output can be found in the Console window.

(2/2 points)

1) Report the parameters of the **exponential** model for the number of internet users in the US for years 1990-1999. *(Round to 3 decimal places)*

a=

1.872 ✔ **Answer:** 1.872

1.872

b=

1.608 ✔ **Answer:** 1.608

1.608

Click here for a video explanation of how to answer this question.

Function Models

Readings
Reading Check due Mar 15, 2016 at 18:00 UTC

Lecture Videos
Comprehension Check due Mar 15, 2016 at 18:00 UTC

R Tutorial Videos

Pre-Lab
Pre-Lab due Mar 15, 2016 at 18:00 UTC

Lab
Lab due Mar 15, 2016 at 18:00 UTC

Problem Set
Problem Set due Mar 15, 2016 at 18:00 UT

You have used 1 of 1 submissions

(2/2 points)

2) Report these parameters of the **logistic** model for the number of internet users in the US for years 1990-1999. *(Round to 1 decimal place)*

C=

127.8 ✔ **Answer:** 127.8

127.8

a=

121.4 ✔ **Answer:** 121.4

121.4

Click here for a video explanation of how to answer this question.

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(1/1 point)

3) What was the actual number of internet users (in millions) in the United States in 2006? *(Round to 1 decimal place)*

205.7 ✔ **Answer:** 205.7

205.7

Click here for a video explanation of how to answer this question.

You have used 1 of 1 submissions

(4/4 points)

How well did the exponential and logistic models predict the number of internet users in 2006?

4a) The exponential model predicted _____ million users in 2006. The residual was _____.

3756 ✔ **Answer:** 3756

-3550 ✔ **Answer:** -3550

4b) The logistic model predicted _____ million users in 2006. The residual was _____.

127.5 ✔ **Answer:** 127.5

78.2 ✔ **Answer:** 78.2

Click here for a video explanation of how to answer this question.

You have used 1 of 1 submissions

(1/1 point)

5) Based on the model residuals for 2006, which model do you think does a **better** job of predicting (long-term) the number of internet users?

- Both models predict the number of internet users in 2006 equally well.
- The exponential model.
- ✔ The logistic model.
- Neither model is a good fit for the data.

Click here for a video explanation of how to answer this question.

You have used 1 of 1 submissions