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Analyze the Data

Primary Research Question

What model best describes the first decade of internet usage (1990-1999) in the United States? Does this model hold through 2012?

Conduct the Analysis in R

- 1. Type or copy the script from the 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 (report to 3

5. 5 5.... p. 15.15

a=

1.872

Help

1.872

Answer: 1.872

b=

1.608

1.608

Answer: 1.608

Final Check

Save

Hide Answer

You have used 1 of 2 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 (report to one decimal place).

C=

127.8

127.8

Answer: 127.8

a=

Help

121.4

121.4

Answer: 121.4

Final Check Save Hide Answer You have used 1 of 2 submissions

(1/1 point)

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

205.7

205.7

Answer: 205.7

Final Check Save Hide Answer You have used 1 of 2 submissions

3 of 5(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 3756

Help

-3551 -3551

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

127.5 127.5

78.2 78.2

Final Check

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You have used 1 of 2 submissions

(1/1 point)

5) Looking at the plots of the models through 2012, which model had the **best fit** to the data?

🕟 The logistic model; the R-squared value was 0.994. 🛛 🗸



None of the models was a good fit; R-squared values were all less than 0.500.

The linear model; the R-squared value was 0.965.

The exponential model; the R-squared value was 0.804.

CORRECT. THE HIGHEST R-SQUARED VALUE AMONG OUR 3 MODELS IS .994, WHICH CORRESPONDS TO THE LOGISTIC MODEL.

Final Check

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Help



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