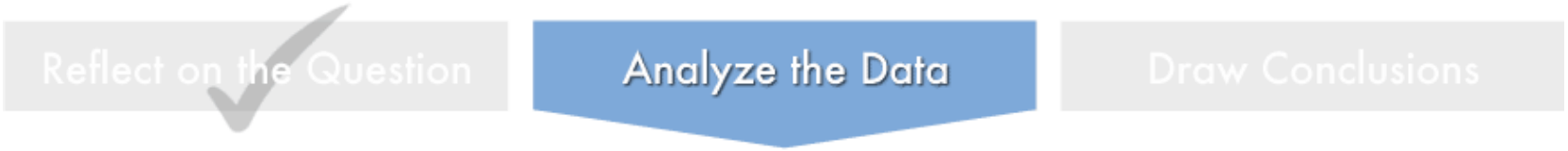

Primary Research Question

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

decimal places).

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=

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*

(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

-3551 -3551

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

127.5 127.5

78.2 78.2

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

Help