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Question 1

How has mobile phone usage in Brazil changed since 1995?

    1. Create a subset of the world bank data that contains records from Brazil 1995 and later.

    2. Change the year variable to be "years since 1995" and update the units of the "mobile.users" variable to millions of users.

    3. Use this data to answer the following questions.

Use the "WorldBankData.csv" dataset to answer the following questions. Instructions for installing "WorldRecords.csv" can be found under the **Examine the Data** *unit in this week's* **Pre-Lab** *section.*

(1 point possible)

1a. Find the number of mobile users in Brazil (in millions) in 2000, using R. *(Round to 2 decimal places.)*

> 20.88

20.88

Answer: 23.19

| Hide Answer | *You have used 1 of 1 submissions*

(1/1 point)

1b. In what year did Brazil first record **more than** 100 million mobile users?
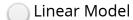
2007

2007

Answer: 2007

| Hide Answer | *You have used 1 of 1 submissions*

1c. Generate a scatterplot and fit a linear, exponential and logistic model to the data. Which model best describes the increase in mobile users in Brazil since 1995?

- ◯ Exponential Model
- ◯ Linear Model
- ◉ Logistic Growth Model ✔

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

Help

(1/1 point)

1d. What proportion of the variation in mobile users is explained by years since 1995 in the best-fitting model? *(Round to 3 decimal places.)*

0.998

0.998

Answer: .998

Hide Answer	*You have used 1 of 1 submissions*

(1 point possible)

1e. Using the best-fitting model, predict the number of mobile users (in millions) in Brazil in 2025. *(Round to zero decimal places.)*

348

348

Answer: 345

Hide Answer	*You have used 1 of 1 submissions*

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