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Question 1

We want to find the best-fitting linear model for men's pole vault world records since 1970.

1. Create a new data frame that contains the world record cases in the men's pole value event in years 1970 and later.
2. Use this data frame to answer the following questions.

Use the "WorldRecords.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.

(1/1 point)

1a. What is the standing world record height (in meters) for men's pole vault? (Round to 2 decimal places.)

Answer: 6.14

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(1/1 point)

1b. In what year did the pole vault record first exceed **6 meters**? (*Look at the data to find the year.*)

1986

1986

Answer: 1986

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(1/1 point)

1c. Create a scatterplot showing the men's pole vault records since 1970 as a function of year. Fit a linear model to the data.

Which of the following best describes how the record has changed over time?

- ☒ The record pole vault height steadily increases over time. ✓
- ☐ The record pole vault height steadily decreases over time.
- ☐ The record pole vault height has a clear non-linear relationship with year.
- ☐ The record pole vault height doesn't seem to have any relationship with year.

[Hide Answer](#)*You have used 1 of 1 submissions*

(1/1 point)

1d. Report the coefficient estimates for the linear model that describes the change in the men's pole vault world record since 1970. What is the intercept? (*Round to 3 decimal places.*)

Answer: -51.854[Hide Answer](#)*You have used 1 of 1 submissions*

(1/1 point)

1e. What is the slope? (*Round to 3 decimal places.*)

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