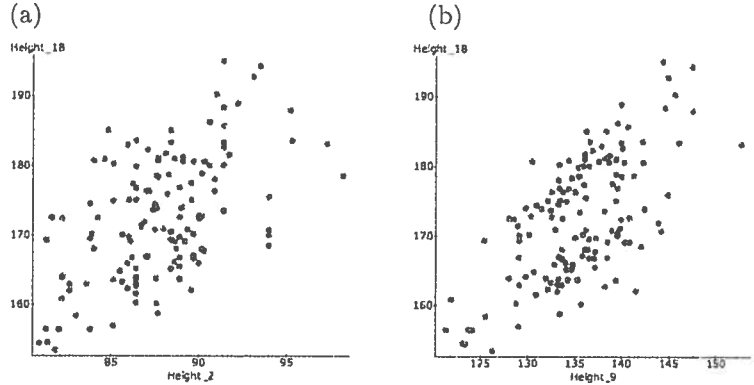


1. Consider the two graphs shown below. For each draw a line that you think accurately fits the data.

For which graph do you think the linear model will be a better predictor of new data points? Why?



2. Tallest Buildings (EXAMPLE)

- Choose a point and describe the information that point provides: $(70, 1450)$

THIS POINT DESCRIBES A BUILDING THAT IS 70 STORIES TALL AND 1450 FEET TALL.

- Draw a line that you think accurately fits the data.

- Write the slope and explain what it represents (be sure to include units).

I CHOSE POINTS ON MY LINE THAT WERE EVENLY SPACED (AT 20 AND 120) IN ORDER TO MAKE MY CALCULATION EASIER

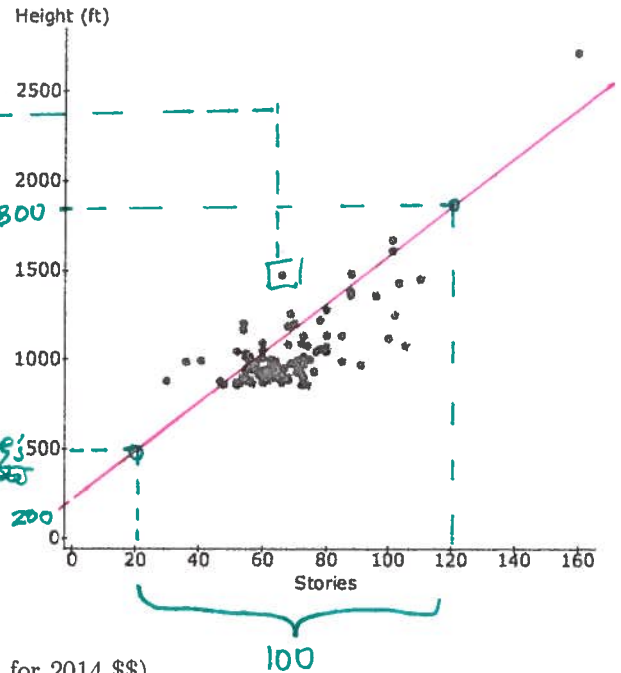
SCOPE: $1300/100 = 13$ ft/story \rightarrow MEANS FOR EACH ADDITIONAL STORY, A BUILDING'S HEIGHT INCREASES BY 13 FEET.

- Comment on how accurately your line fits the data.

(FIT PRETTY STRONG.)

- Write an approximate equation for the line you drew.

$HEIGHT = 200 + 13 \times (\text{STORIES})$



3. Air Fare and Fuel Costs (Air Fares from 2000 – 2014 adjusted for 2014 \$\$)

- Choose a point and describe the information that point provides:

- Draw a line that you think accurately fits the data.

- Write the slope and explain what it represents (be sure to include units).

- Comment on how accurately your line fits the data.

- Write an approximate equation for the line you drew.

