

Name: _____

Date: _____

Olympic Gold (Regression Wisdom)

These questions are imbedded in the activity so students will have an idea when to answer each question.

Question #A (Yes I said "Number A") Do you think that we will be able to come up with an accurate model to predict the number of gold medals the US will win based on the year of the competition? Why or why not?

Question #B Were you right on #A??? What do think will happen when we cut out those 3 points?

Question #C: Using at least 3 of the vocabulary words provided on page 1.6 of the calculator activity, describe what happened when we removed the 3 points.

Question #E (D was skipped on purpose.)

I think we can all agree that predicting the number of US gold medals by year isn't very effective. Why not? State at least 3 reasons why using year might not be a good idea.

Question #F

Do you think that there will be a higher or lower correlation and variance now that we are using total US medals won instead of year? (Do not cut data this time).

Question #D: (Yes, now it's time for D).

Without calculating, make a prediction about the correlation and variance compared to the full set of data.

Question #G. Write the equation. State what it means in words. Interpret the correlation and variance.

Question H: The US won 110 medals in 2008. Use the model we created in Question G to extrapolate how many gold medals the US won. How does this compare to the actual number (36)?