Biostatistics 140.653
Third Term, 2021
February 15, 2020
Quiz 1

The purpose of this quiz is to assess your knowledge of the course materials covered during the first two weeks of class and covered in Problem Set 1.

Instructions:

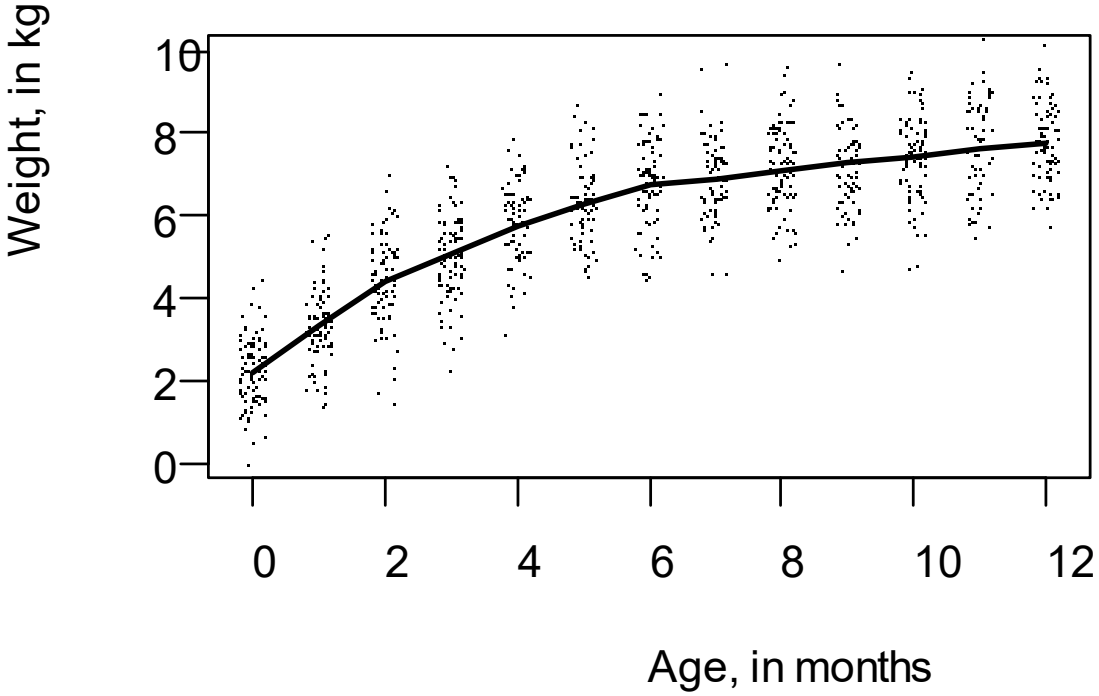
- **This is an open book quiz; you may consult your course notes and handouts.**
- **You should not discuss this quiz with any other student during Monday Feb 15th.**
- **This quiz is designed to be completed in 20-30 minutes.**
- **You may provide your solution by editing the word version of this quiz, annotating the pdf version of this quiz or writing your solution on paper and submitting a picture of your solution.**

By signing my name, I enter agree to abide by the instructions above and the Johns Hopkins University School of Public Health Academic Code:

Name (Print): _____

Signature: _____

Below find a plot of weight against age (points include horizontal jitter) and a fitted curve estimated using a particular linear regression model with a subset of observations from the Nepali Children's Anthropometry Dataset that you used in Problem Set 1.



1. Write the **multiple linear regression equation** for the fitted line **using specific numeric values** (not letters) for the coefficients. (Hint: if you site down the line, you will see 3 knots at 2, 4, and 6 months)

2. An estimate of the residual standard deviation is (choose single best answer)

(a). 0.2 kg
(b). 0.8 kg
(c). 2 kg
(d). 8 kg
(e). 20 kg