Question 12 - 14

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Now, imagine that you are considering a similar randomized experiment as the Duflo/Hanna/Ryan camera experiment, except you plan to give teachers lower incentives - half the monetary amount as in the Duflo/Hanna/Ryan experiment.

Question 12

1/1 point (graded)

If you think that the relationship between incentives and the variable **open** is linear, what would be the expected ATE of this new intervention?

Please round your answer to the third decimal place, i.e. if it is 0.3414, please round to 0.341.

0.098 ✔ **Answer:** 0.098

0.098

Explanation

Since we are assuming a linear relationship then half of the incentives should have half of the effect. Then, our estimate would be $\frac{0.1969}{2} = 0.09845 \approx 0.098$

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✔ Correct (1/1 point)

Question 13

1.0/1.0 point (graded)

Assume that this value is the minimum ATE such that the intervention is cost-effective. What is the sample size required to have a power of at least 90%, with the following properties?

- with a significance level of 5%
- an equal number of treated and control units
- σ^2 is the average of the variance of the control and the treatment group in the existing data

a. 100

b. 110 ✔

c. 120

d. 130

Use of Randomization and Nonparametric Regression
Finger Exercises due Nov 21, 2016 at 05:00 IST

Module 8: Homework
Homework due Nov 14, 2016 at 05:00 IST

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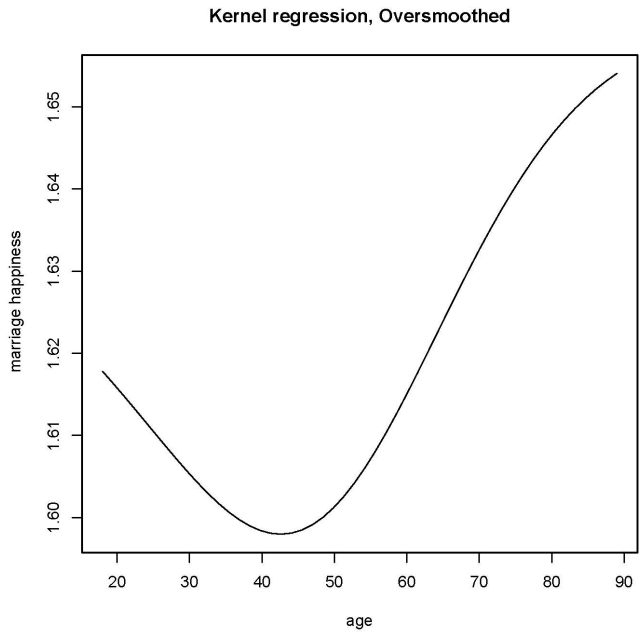
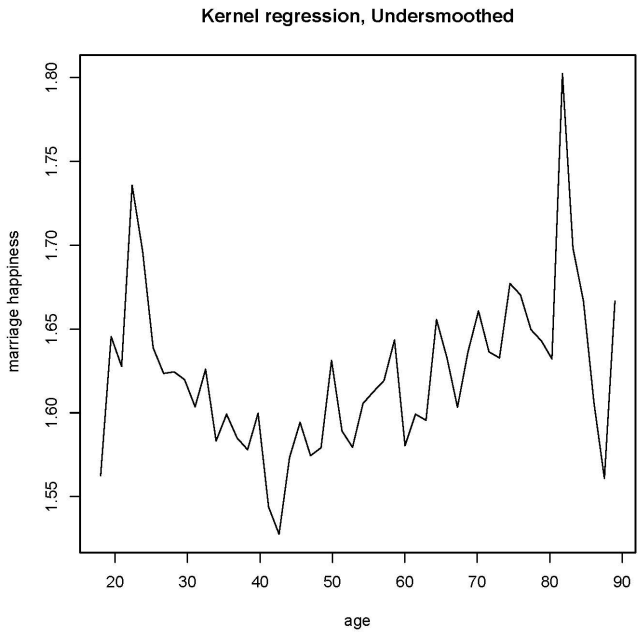
Now we are going to consider non parametric regressions. The following plots show three different non-parametric regressions that relates the level of happiness in a marriage with age (where 2 corresponds to "very happy", 1 to "pretty happy", and 0 to "not too happy").

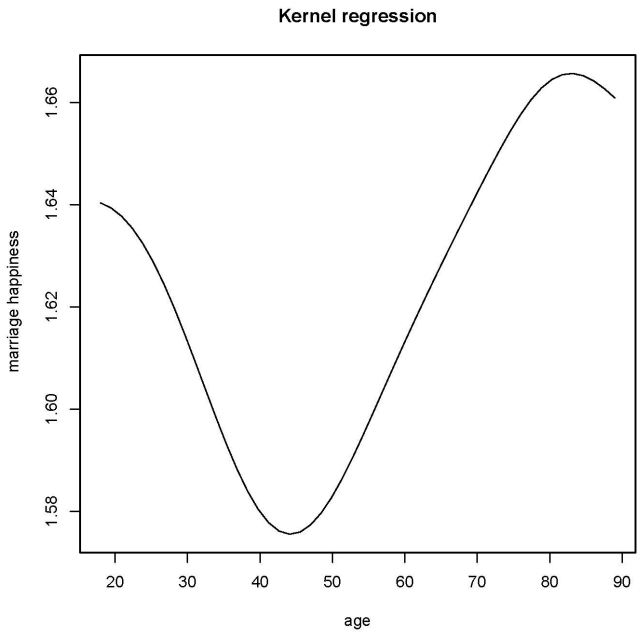
Plot A:



Plot B:


Kernel regression, Undersmoothed
marriage happiness
1.55
1.60
1.65
1.70
1.75
1.80
20
30
40
50
60
70
80
90
age

Plot C:



Question 14

1.0/1.0 point (graded)

Rank the three plots from the one with the narrower to the wider bandwidth.

- a, b, c
- a, c, b
- b, a, c
- b, c, a ✔

- c, a, b
- c, b, a

Submit You have used 1 of 2 attempts