

Application exercise:

Distributions of numerical variables

WRITE YOUR RESPONSES ON A PIECE OF PAPER. WRITE LEGIBLY! ONLY ONE SUBMISSION PER TEAM IS REQUIRED. ONE TEAM WILL BE RANDOMLY SELECTED AND THEIR RESPONSES WILL BE DISCUSSED AND GRADED.

Shapes of distributions

- Below are two histograms. One corresponds to the age at which a sample of people applied for marriage licenses; the other corresponds to the last digit of a sample of social security numbers. Which graph is which, and why?

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(a) figures/last_{digit}_{SN}

(b) figures/age_{mar}_{lic}

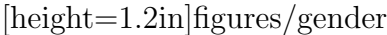
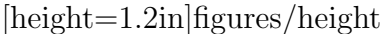
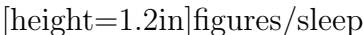
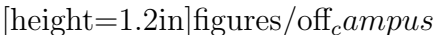


- Match the following variables with the histograms and bar graphs given below. These data represent Sta 101 students at Duke. [*Hint: Think about how each variable should behave.*]

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- the height of students
- gender breakdown of students
- the time it took students to get to their first class of the day
- the number of hours of sleep students received last night

- (e) whether or not students live off campus
- (f) the number of piercings students have

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- (1) figures/gender
- (2) figures/height
- (3) figures/sleep
- (4) figures/off_c*ampus*
- (5) figures/piercings
- (6) figures/time_t*o*_c*lass*