Profit Sharing Exercise

*Note*: Please visit <https://jamiefield.github.io/portfolio/spring2020/> for the data set for this exercise

You work for a medium-sized organization (# of employees = 200) that shares a portion of its annual profit with its employees. The size of the bonus received by each employee is determined by his/her annual performance. Specifically, better performance = bigger bonus.

It is your job to award the bonuses. As such, it is your job to conduct a broad, yet specific, performance review that determines how much each employee receives for their bonus.

Imagine that the organization plans for share $200,000 among those employees that satisfy certain performance criteria. Any given employee is eligible for a bonus if he/she had monthly sales that exceed the organizational average (i.e., across all months and employees) in three or more months during the calendar year.

a. What was the average monthly sales for the entire organization?

b. How many employees exceeded this benchmark in five or more months last year and, thus, are eligible for a bonus?

c. How many employees are not eligible for a bonus?

Your organization also tracks each individual’s annual safety record (i.e., number of safety violations from Jan. 1 – Dece. 31; higher number = poorer safety record). An employee is given an extra bonus if he/she has zero safety violations during the year *and* had monthly sales that exceed the organizational average (i.e., across all months and employees) in five or more months.

c. How many employees had zero safety violations from Jan. 1 – Dece. 31 *and* had monthly sales that exceed the organizational average (i.e., across all months and employees) in five or more months?