**Analytics Results Test**

Please create a spreadsheet that presents the results of the three emails whose statistics are provided below. Each email should be on a separate row. Your spreadsheet should include the following columns from the email statistics:

* Send date
* Subject line
* Sent count
* Number of opens
* Number of clicks
* Number of gifts
* Total Raised

You should also include the following statistics as columns. Please generate them by formulas in the function bar:

* Open rate (opens/sent)
* Clicks/sent
* Clicks/opens
* Gifts/sent
* Gifts/opens
* Gifts/clicks
* Average gift (total raised/gifts)

Finally, please also include a row that totals each statistic across the emails. Please be mindful that the totals and averages accurately reflect the aggregate amount. When appropriate, please generate through formulas.

Once you are finished making the spreadsheet, please answer the following questions. Please use the spreadsheet for questions 1-3. Please highlight your answer and give an explanation for questions 4-5.

**Email Data Results**

Send Date: 4/30/15

Subject line: Only You

Sent: 418,328

Opens: 62,676

Clicked: 3,486

Gifts: 103

Total raised: $3,189

Send Date: 4/26/15

Subject line: before midnight

Sent: 417,767

Opens: 66,396

Clicked: 2,941

Gifts: 224

Total raised: $1,478

Send Date: 4/23/15

Subject line: got a sec

Sent: 415,714

Opens: 64,347

Clicked: 2,289

Gifts: 71

Total raised: $1,283

**Questions**

1. By what percentage did the gifts/clicks ratio improve from “only you” to “before midnight”? Please show your math.

2. In the email “before midnight,” if the gift/open ratio held steady, how many opens would be required to reach 300 gifts? Please show your math.

3. Please rank the emails in order of best to worst performance and please explain why you selected that order.

4. Should the client be concerned about the drop in average gift from the “this is crazy” email to the “one more minute” message? Please explain your answer.

|  |  |  |  |
| --- | --- | --- | --- |
| **Subject** | **Gifts** | **Raised** | **Average Gift** |
| one more minute | 70 | $2,109 | $30.13 |
| this is crazy | 51 | $2,543 | $49.86 |

Explanation: It is unclear with the information given whether the client should be concerned. While the ‘this is crazy’ message does raise more money and have a higher average gift, it could be due to reasons that do not represent the efficiency of the message. For example, it could be that ‘this is the crazy’ message was sent to much more emails, but had lower open and/or click rates. This would make it be seen as less effective than the other message. An alternative reason could be that the user base of the two messages is different. That is, the ‘one more minute’ message was sent to the general populace while the ‘this is crazy message’ was sent to established supporters. In that case, the higher average gift is explained through the difference in average gifts and the efficiency of the messages cannot be properly compared. Overall, more information is needed to compare the difference in average gifts, such as the open and click data, or information about the userbases.

5. How would you say the response rate for the “one more minute” message compares to the “can’t stop hitting refresh” message? Please explain your answer and show your math.

|  |  |  |  |
| --- | --- | --- | --- |
| **Subject** | **Sent** | **Open Rate** | **Response Rate** |
| one more minute | 33,251 | 21.4% | 0.12% |
| can’t stop hitting refresh | 33,160 | 22.0% | 0.08% |

a) Much better

b) Better

c) About the same

d) Worse

e) Much worse

Explanation:

The response rate of “one more minute” is in terms of ratios significantly higher than that of “can’t stop hitting refresh”. It is 50% larger than that of “can’t stop hitting refresh”(use percentage difference=response rate(one more minute)/ response rate(cant stop hitting refresh) ). However, because the response rate of both emails is a very small fraction, it is possible that the difference in response rate is not statistically significant(due to the large sent emails amount of each message) and thus the difference is not actually meaningful.