Mock Test #2
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Exploration of relig_income data, taken from the USA.

Q1: is there a correlation between high income earners and religious affiliation in the US
Q2: which religious affiliation appear to earn more money?

Analysis
To investigate these questions with respect to the relig_income dataset (and it should be noted that more data is needed to conduct a study of this type accurately), we begin by normalizing the counts by the total number of people represented in each religion. This provides a "comparable" set of numbers since the quantities represent the "percentage of" individuals in a given religious group by income bracket.

Incidentally, with 18 religious affiliations represented, the total counts are as follows:

Religion	count
Agnostic	315
Atheist	206
Buddhist	154
Catholic	2374
Don't Know	56
Evangelical Protestant	2086
Hindu	149
Historically Black Protestant	290
Jehovah's Witness	32
Jewish	307
Mainline Protestant	2326
Mormon	176
Muslim	30
Orthodox	126

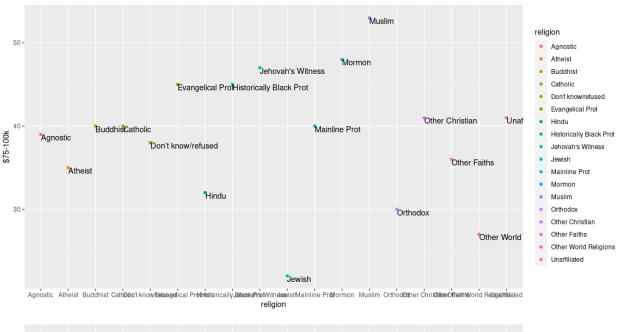|	
Other Christian	44
Other Faiths	127
Other World Religions	11
Unaffiliated	986

Note that the lower counts associated with some groups such as Jehovah's Witness (32), Muslim (30) and Other World Religions (11), may somewhat skew the data for these affiliations, since they may not represent a sufficiently random sampling across the US.
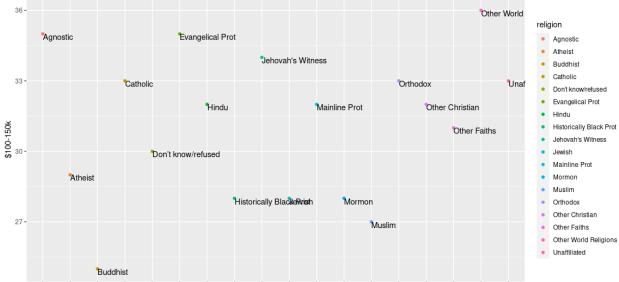
Once we have normalized the counts, we look at the higher income brackets, namely $75-100k, $100-150k, and >150k, to get a sense of the proportion of people within each group who are in the brackets. From these plots, it appears as though the top three religious affiliations for each bracket are:

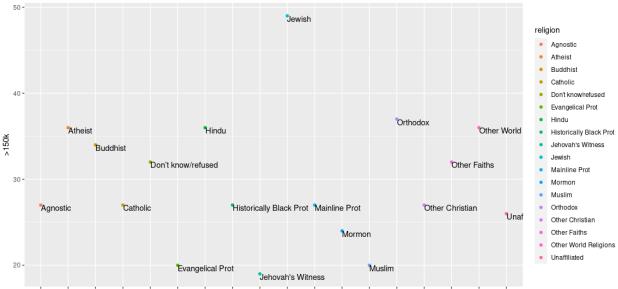| Income Bracket	Top Three Affiliations (in descending order, by percentage of the group)
$75-100k	Muslim, Mormon, Jehovah's Witness
$100-150k	Other World Religions, Agnostics, Evangelical Protestants
>$150k	Jewish, Orthodox, Hindu

Amongst these three high income brackets, there appears to be a fairly broad representation of religious affiliation; in other words, the rich appear to comprise a fairly diverse group.

 Plots

Top chart — y-axis: $75-100k; x-axis: religion

Y-axis values: 50, 40, 30

Data point labels: Muslim, Mormon, Jehovah's Witness, Evangelical Prot, Historically Black Prot, Other Christian, Unaf(filiated), Buddhist, Catholic, Mainline Prot, Agnostic, Don't know/refused, Other Faiths, Atheist, Hindu, Orthodox, Other World, Jewish

X-axis labels: Agnostic, Atheist, Buddhist, Catholic, Don't know/refused, Evangelical Prot, Historically Black Prot, Jehovah's Witness, Jewish, Mainline Prot, Mormon, Muslim, Orthodox, Other Christian, Other Faiths, Other World Religions, Unaffiliated

Bottom chart — y-axis: $100-150k; x-axis: religion

Y-axis values: 36, 33, 30, 27

Data point labels: Other World, Agnostic, Evangelical Prot, Jehovah's Witness, Catholic, Orthodox, Unaf(filiated), Hindu, Mainline Prot, Other Christian, Other Faiths, Don't know/refused, Atheist, Historically Black Prot, Jewish, Mormon, Muslim, Buddhist

X-axis labels: Agnostic, Atheist, Buddhist, Catholic, Don't know/refused, Evangelical Prot, Historically Black Prot, Jehovah's Witness, Jewish, Mainline Prot, Mormon, Muslim, Orthodox, Other Christian, Other Faiths, Other World Religions, Unaffiliated