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Quantitative Analysis Assignment

POLS 1100: Worksheet #1

Use the table below to answer questions 1, 2 and 3.

State	Median Household Income	Median Price of House
<i>Utah</i>	\$ 55,220.00	\$ 146,100.00
<i>Colorado</i>	\$ 55,517.00	\$ 166,600.00
<i>Wyoming</i>	\$ 52,433.00	\$ 96,600.00
<i>Idaho</i>	\$ 46,136.00	\$ 106,300.00
<i>Montana</i>	\$ 43,000.00	\$ 99,500.00

Question 1: What do we mean by terms like "median household income" and "median house price"? The median is the middle number, like the median on the freeway and its position in relativity to the lanes on either side. It's the middle. So in a scan of prices across the country, we could come up with 100,000; 300,000; 400,000; 900,000; and 1,000,000. While 400,000 might not necessarily be the average with the strong outliers of 900,000 and 1,000,000, it's still the middle number within this set.

Question 2: Which state has the highest median household income, and which state has the lowest? Colorado boasts the highest while Montana seems to have the lowest.

Question 3: What is Montana's household income as a percentage of Utah's. Explain how you arrived at your answer. It's about 78% of Utah's income. In dividing Montana's income by Utah's, we come to 0.778... which roughly equals 78%.

Question 4: Which state has the highest median family income as a percentage of the median house price in that state? Explain how you arrived at your answer. Wyoming seems to be the best place to purchase a home in regards to your income. The median annual income is about 54% of the median price of a home. Everywhere else has percentages below 50 and 40 percent.

(Over)

Use the table below to answer questions 5 and 6.

Candidate	Number of Donors	Money Raised
<i>Mr. Salinger</i>	895	\$180,000
<i>Mrs. Shelley</i>	1,562	\$200,000
<i>Mr. Vonnegut</i>	367	\$190,000
<i>Ms. Atwood</i>	505	\$140,000

Question 5: Overall, which candidate raised the most money per donor? Explain how you arrived at your answer. Mr. Vonnegut received nearly 518 dollars per donor. You can check every answer, but you can also know this because he had the fewest donors, but subsequently had the second highest amount of money. And since the person with the highest amount of money also had the highest amount of donors (at double the second-highest), it's obvious that Mr. Vonnegut's donors gave more on average.

Question 6: Calculate Ms. Atwood's number of donors as a percentage of Mrs. Shelly's. Explain how you arrived at your answer. The number of donors Ms. Atwood had was about 32% or the number that Mrs. Shelly had. I came to the answer by dividing Ms. Atwood's donors by Mrs. Shelly's.

Question 7: Between the four candidates, what is the mean amount of money raised? Explain how you arrived at your answer. By adding the numbers together, you get 710,000. If you then divide them by the number of candidates (4) you get 177,500, and that is the mean.

Question 8: Between the four candidates, what is the mean number of donors? Explain how you arrived at your answer. Adding up all of the donors brings us to 3329, and dividing them by 4 just as above brings the number to 832.25, making that the mean number of donors.

Question 9: Calculate Mr. Salinger's money raised as a percentage of that raised by Mr. Vonnegut. Explain how you arrived at your answer. It's about 94 or 95 percent of what Mr. Vonnegut raised. This is learned by dividing Mr. Salinger's money by Mr. Vonnegut's.

Question 10: Comparing Mr. Salinger and Ms. Atwood, which candidate raised the most money per donor? Explain how you arrived at your answer. Mr. Salinger raised around \$201 per donor, while Ms. Atwood raised around \$277 dollars per donor, meaning that she raised more per donor than Mr. Salinger.