From each case, determine if we want to use

1. Z-confidence interval
2. T-confidence interval
3. We assume the monthly rent for an apartment is approximately normally distributed with a standard deviation of $90. We find the mean monthly rent for a random sample of 10 apartments is $640.Find a 99% confidence interval for the mean monthly rent for apartments.

a.

1. From a sample of 16 apartments the mean is $508 with a standard deviation of $78. Find a 99% confidence interval for the mean monthly rent for apartments.

b.

1. If the 90% confidence limits for the population mean are 34 and 46, which of the following could be the 99% confidence limits
2. (36,41)
3. (39,41)
4. (30,50)
5. (39,43)
6. (38,45)
7. Given that the population standard deviation is 7500 and a 95% confidence level. What should be the sample size if we want the margin of error to be m=100?
8. 7125
9. 147
10. 21609
11. 21610
12. Suppose that prior to conducting a coin flipping experiment, we suspect that the coin is fair. How many times would we have to flip the coin in order to obtain a 96.5% confidence interval of width of at most 0.16 for the probability of flipping a head?
13. 140
14. 156
15. 173
16. 174
17. 175