Surprise mini-quiz: ME318L (statistics)

1. You have 35 measurements of x, with S_x=2 and exact statistics of x unknown. The likely 95% confidence interval in x is:
   - ❑ 42
   - ❑ ±2*95%=±1.9
   - ❑ ±3.29*2=±6.58
   - ❑ ±2*1.96=±3.92

2. In a *standard* distribution, what percentage of the population lies between z=-0.42 and z=0.42?
   - ❑ 42%
   - ❑ 32.56%
   - ❑ 160%

3. The bias uncertainty of the measurement is 2V, the precision uncertainty of the measurement is ±1V. Given that this is the only information you have, what is the best guess for the total uncertainty at 99% confidence level?
   - ❑ 3V
   - ❑ Who cares?
   - ❑ 2.23V
   - ❑ 1V