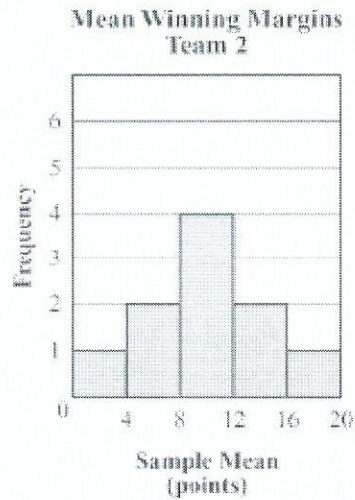
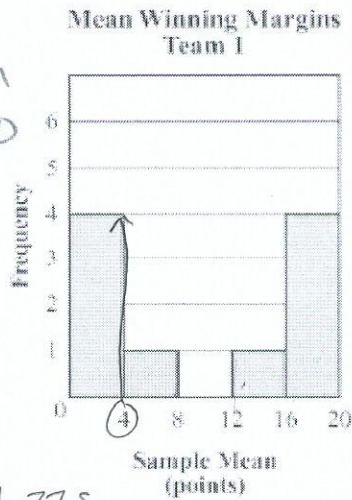


3. Kara took 10 random samples of the winning margins for each of two professional basketball teams. The sample size was 4. The distributions of the sample means are shown in these histograms.

use box graph
to get data then
use calculator to
find dev

data	freq
4	4
8	1
16	1
20	4

$$\sigma_x = 7.375$$



data	freq
4	1
8	2
12	4
16	2
20	1

$$\sigma_x = 4.38$$

Which is the best estimate of the standard deviation for both samples?

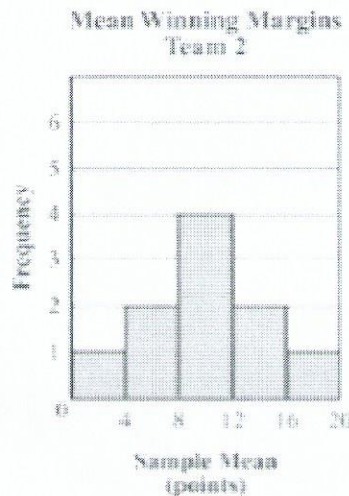
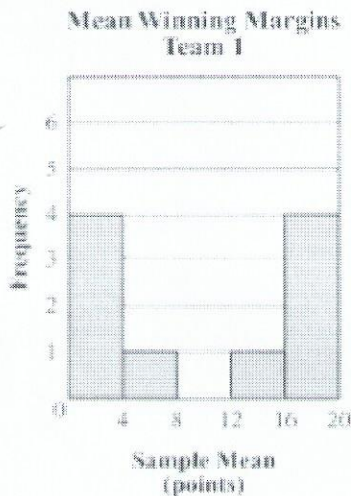
- A. Team 1: 3.75 points; Team 2: 2.2 points
 B. Team 1: 7.4 points; Team 2: 4.4 points
 C. Team 1: 15 points; Team 2: 8.8 points
 D. Team 1: 10 points; Team 2: 10 points

4. John took 10 random samples of the winning margins for each of two professional basketball teams. The distributions of the sample means are shown in these histograms.

use calc to
find stats
and compare

$$\bar{x} = 12$$

$$\sigma_x = 7.375$$



$$\bar{x} = 12$$

$$\sigma_x = 4.38$$

Based on John's data, which statement is MOST likely true?

- A. Both the sample mean and the sample standard deviation are greater for Team 1 than for Team 2.
 B. The sample means for both teams are equal, but the sample standard deviation for Team 1 is greater.
 C. The sample means for both teams are equal, but the sample standard deviation for Team 2 is greater.
 D. Both the sample mean and the sample standard deviation are greater for Team 2 than for Team 1.