

WT2019 Probability HW

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Unit 5.1

Problem 1:

a. as the number of recorded times that Aaron has tuned into his favorite radio station increases, the percent of those times in which he tunes in to a commercial playing will approach 20%.

b. not necessarily: each time he tunes in is a separate event, and therefore has its own .2 probability, but there is no guaranty that in 5 (or in any arbitrarily large set of repetitions) that a commercial will be playing at all.

5. because the percent of 3-point shots made approaches roughly 25% over time, we can reasonable conclude that the probability of making any given shot is around .25.

10.

a. generate a random integer between 0 and 1, assume that 0 is a miss and one is in bounds.

b. 1 in 100 trials resulted in six missed serves.

c. $7/100$

d. not really $2/20$ is a .1 probability and is the most common and median, but not the mean.

23. c.