

Math 13 Chapter 9 Overview

1) Who is a better quarterback: Payton Manning or Drew Brees? I collected the stats from the last 2 years worth of regular season games. That is 32 games for each player. Payton Manning averaged 8.2 yards per play with $s = 2.3$. Drew Brees averaged 7.8 yards per play with $s = 2.1$. Test the claim that the two players are equally good.

2) Last semester I had 32 Precalculus students that averaged 76.7 on exams with $s = 15.7$. I also had 40 Calculus students that averaged 82.8 on exams with $s = 11.3$. Test the claim that Calculus class did better than the Precalculus on exams.

3) Which NBA player is currently the best 3-point shot maker? Marco Belinelli of San Antonio Spurs has made 61 out 121 of his 3-point attempts. Andre Iguadala of the Golden State Warriors has made 32 out of 82 of his 3-point attempts. Test the claim that Belinelli is the better player.

4) Last semester I had 32 Precalculus students that averaged 76.7 on exams with $s = 15.7$. I also had 40 Calculus students that averaged 82.8 on exams with $s = 11.3$. Test the claim that these two classes have the same standard deviation on exams.

5) Twelve people joined a weight loss program for 6 weeks. Listed below are their weights when they started and after 6 weeks. Test the claim that the weight loss program is effective.

Before	After
180	172
167	160
194	192
210	199
220	220
179	170
188	182
224	220
179	171
175	169
201	190
160	155