* 1. A non-informative prior would be if θ ~ Uniform(-1, 1). This gives θ an equal chance to be anywhere between (-1, 1). I chose these parameter values because the difference in shots made frequency cannot be less than -1 nor greater than 1.
  2. A subjective prior based on my knowledge of free throw shooting would be θ ~ Normal(mean = 0.2, sd = 0.3). I chose 0.2 for the mean because it is likely that daily 50 practice shots over a month increases their shooting percentage but not by a drastic amount. I chose 0.2 because the percent improvement will vary a decent amount given student’s prior skillset and their natural athletic abilities. (0.2-2(0.3), 0.2+2(0.3)) = (-0.4, 0.5).