

Normal Model Review Problems
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1. The mean number of pancakes that young girls can eat is 850 with a standard deviation of 100. Molly sits down and eats 940 pancakes. What percent of young girls can eat more pancakes than Molly? (Assume pancake eating amongst young girls is Normally Distributed)
2. Reginald the Starfish wants to compete in the "Deep Sea Olympics." In order to qualify for the events, he needs to be in the top 15% of starfish in the jumping jacks competition. How many jumping jacks will he have to do in order to qualify? (Assume starfish jumping jacks $\sim N(9.4, 1.5)$)
3. The number of chairs a person in MA owns is normally distributed with a mean of 325 chairs and a standard deviation of 55. What percent of the population of MA owns between 300 and 400 chairs?
4. The mean height of elephants is 172 inches. Twenty-five percent of elephants are 180 inches or taller. Assuming normality, what is the standard deviation of this model?