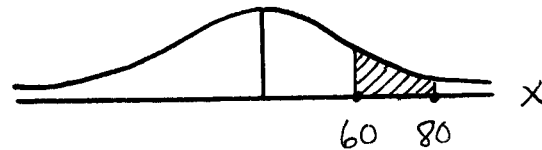
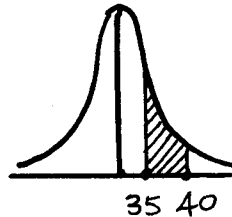


5.7 Scores are normally distributed with a mean of 30 and a standard deviation of 20. If one score is chosen at random, what is the probability that it is between 60 and 80? If a random sample of 25 scores is taken, what is the probability that the sample mean is between 35 and 45?



$$(a) P(60 < X < 80) = \text{normalcdf}(60,80,30,20) \approx \boxed{0.061}$$



$$(b) P(35 < X < 45) = \text{normalcdf}(35,45,30,20/\sqrt{25}) \approx \boxed{0.106}$$

**STUDY:** Chapter 5: Section 5.3 & 5.5 (C.L.T.)  
 • Normal Distributions