warm-up:

Find the indicated probability using the standard normal distribution table. Make a sketch to represent the area under the curve.

1. P(z<-1.24)   2. P(z<-2.14 or z>2.14)   3. P(z>2.57)

4. A certain pit crew for auto racing has a population mean pit stop time of 13 seconds and population standard deviation of 0.19 second. A sample of 32 pit stop times has a sample mean of 12.9 seconds. Find the z-score for the sample mean. Remember that $z = \dfrac{\bar{x} - \mu}{\dfrac{\sigma}{\sqrt{n}}}$ in this case.