## Date:

## MATH 140 Name \_\_\_\_\_ Worksheet: Normal Distributions Part II

1. Find the value L in the distribution N(14,4) that marks the 90th percentile. That is, find the value L such that P(X < L) = 0.9



2. Scores on a test are normally distributed with mean 78 and standard deviation 6. How high must you score to be in the top 2% of all scores?

3. The time it takes Ralph to commute to work has a normal distribution, with a mean of 23 minutes and a standard deviation of 2.5 minutes. On 95% of occasions the commute time takes less than what amount?