

Week 4 Tutorial Activity

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The average on a statistics test was 78 with a standard deviation of 8. If the test scores are normally distributed,

find the probability that a student receives a test score less than 90.

(93%)

find the probability that a student receives a test score greater than 85

(40%)

find the probability that a student receives a test score between 60 and 80

(79%)

find the score k, such that there would be 93% probability for a randomly chosen score to be above k

(K = 66.2)

```
less90 <- pnorm(90, mean = 78, sd = 8)
less90
```

```
## [1] 0.9331928
```

```
great80 <- 1 - pnorm(80, mean = 78, sd = 8)
great80
```

```
## [1] 0.4012937
```

```
twixt68 <- 0.8 - pnorm(60, mean = 78, sd = 8)
twixt68
```

```
## [1] 0.7877755
```

```
kmeans93above <- qnorm(.07, mean = 78, sd = 8)
kmeans93above
```

```
## [1] 66.19367
```