method.

```
## Compare the accuracy and runtime for cdf method and rejection sampling
par(mfrow=c(1,2))
n <- 1e5
x.crct <- rnorm(n, mu, sigma)
x.crct <- x.crct[x.crct >= mu.lo]

## Runtime for the cdf method
print(system.time({
  p <- runif(n, 0, 1)
  x.cdf <- cdf.inv(p, mu, mu.lo, sigma)
}))
```

```
##    user  system elapsed
##   0.008   0.000   0.008
```

```
qqp.cdf <- qqplot(x.crct, x.cdf, main = "cdf method vs. truncated rnorm")
abline(0,1)
## Accuracy for the cdf method
corr.cdf <- cor(qqp.cdf$x, qqp.cdf$y)
print(corr.cdf)
```

```
## [1] 0.9999782
```

```
## Runtime for the rejection sampling method
print(system.time({
  result.rejsamp <- rejsamp(n, mu, mu.lo, sigma)
}))
```

```
##    user  system elapsed
##   0.020   0.000   0.018
```

```
x.rejsamp <- result.rejsamp$x
qqp.rejsamp <- qqplot(x.crct, x.rejsamp, main = "rejection sampling vs. truncated norm")
abline(0,1)
```