Shi.Chunlin.Hw3_2

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$\mathbf{Q7}$

(a)

```
mu = -8
sigma = 2
pnorm(-5, mean = mu, sd = sigma)
## [1] 0.9331928
(b)
print(pnorm(7, mean = mu, sd = sigma)-pnorm(-2, mean = mu, sd = sigma))
## [1] 0.001349898
(c)
print(1-pnorm(3, mean = mu, sd = sigma))
## [1] 1.898956e-08
(d)
## 40th Percentile
print(qnorm(p = 0.4, mean = mu, sd = sigma))
## [1] -8.506694
## 77th Percentile
print(qnorm(p = 0.77, mean = mu, sd = sigma))
## [1] -6.522306
```