

# Appendix

Jadon Fowler, STA 570 Section 1

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1) a)

```
pnorm(230, 222, 5, lower.tail=F)
```

```
## [1] 0.05479929
```

1) e)

```
pnorm(230, 222, 2.041241, lower.tail=F)
```

```
## [1] 4.442455e-05
```

2) a)

```
pnorm(9, 10, 1.5)
```

```
## [1] 0.2524925
```

2) b)

```
pnorm(9, 10, sqrt((1.5^2) / 5))
```

```
## [1] 0.06801856
```

3) a)

```
pnorm(296, 298, 3)
```

```
## [1] 0.2524925
```

3) b) n=6

```
pnorm(296, 298, sqrt(3/2))
```

```
## [1] 0.05123522
```

3) c)

```
pnorm(299, 298, 3) - pnorm(297, 298, 3)
```

```
## [1] 0.2611173
```

3) d)

```
pnorm(299, 298, sqrt(9/10)) - pnorm(297, 298, sqrt(9/10))
```

```
## [1] 0.7081595
```

3) e)

```
pnorm(298, 300, 3)
```

```
## [1] 0.2524925
```