# Lab 4 - The Normal Distribution Solution

#### MATH224 - Intro to Stat

For exercise 1 & 2, don't remove points for not including mean = 0 and sd = 1 as it is just the standard normal.

For exercise 3, 4 & 5, remove a point each if they don't have the right numbers such as the cut off point, mean and sd. Same with the function as well.

## Exercise 1 (4 Points)

```
pnorm(-0.33, mean = 0, sd = 1)
## [1] 0.3707
```

### Exercise 2 (4 Points)

```
pnorm(1.89, mean = 0, sd = 1) - pnorm(-1.89, mean = 0, sd = 1)
```

#### Exercise 3 (4 Points)

## [1] 0.941242

## [1] 0.1150697

```
1 - pnorm(83, mean = 77, sd = 5)
```

#### Exercise 4 (4 Points)

```
qnorm(0.10, mean = 77, sd = 5)
```

## [1] 70.59224

## Exercise 5 (4 Points)

```
qnorm(0.95, mean = 77, sd = 5)
```

## [1] 85.22427