

Phys/Comp 546 Pattern Recognition

HW 7B

1. How is it possible to get PPVs less than 50%? (Recall we had a PPV of 8% in the mammography example). Using `discriminant.xls`, adjust the μ 's and σ 's of the two classes to get a sensitivity close to 80% and a PPV close to 8%. Show screenshots of the values and tables, and of the resulting Gaussians (next tab of `discriminant.xls`).

ANS:

2. Explain the most convenient way for getting (some of) the iris data from the `iris. jmp` file into the Classification toolbox/MatLab.

ANS:

```
variable=pattern
```

```
pattern=iris_dataset
```

```
clc;
```

```
close all;
```

```
imtool close all;
```

```
clear;
```

```
workspace;
```

```
x = randn (100,1);
```

```
d = 4;
```

```
n = 150;
```