

Lesson 9

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Example: Aim:

a) mean

$$E[X] = \sum x \times p(x)$$

```
x <- c(0:5)
y <- c(229, 211, 93, 35, 7, 1)
p_x <- y/sum(y)
lambda <- sum(x * p_x)
lambda
```

```
## [1] 0.9288194
```

b)

```
p_new <- dpois(x, lambda = lambda)
p_new
```

```
## [1] 0.39501978 0.36690205 0.17039288 0.05275474 0.01224991 0.00227559
```

```
y_pred <- round(p_new * sum(y))
plot(y_pred, y)
abline(0,1)
```

