

# Homework 0 template

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## 1 Coinflip Trivia

Write formula as you would in LaTeX

$$\mathbb{P}(HT|T) = p.$$

## 2 Exchangeability

### 2.1 Use subsections for sub-questions

### 2.2 Match the sub-question labels

This question has 2 sub-questions

## 3 Gamma-Poisson

We strongly recommend following style guide for code chunks. See, for example, Advanced R [<http://adv-r.had.co.nz/Style.html>], or Google's R stype guide [<https://google.github.io/styleguide/Rguide.xml>].

Always set seed in your simulation

```
set.seed(123)
(N <- rpois(n = 1, lambda = 5))
```

```
## [1] 4
```

## 4 Gaussian Example

Always label axes in your plots

```
par(mar = c(4,4,1,1), las = 1)
x <- seq(-10, 10, length = 1000)
plot(x, sin(x), xlab = "x-values", ylab = "f(x)",
     type = "l", cex = 0.5, ylim = c(-1.2, 1.5))
lines(x, cos(x), lty = 4, lwd = 2)
abline(h = 0)
legend("topright", legend = c("y = sin(x)", "y = cos(x)"),
     lty = c(1, 4), bty = "n")
```

