MVBU_graph

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```r
# Define sample size
n <- 100

# Generate x values
x <- seq(0.01, 1, length.out = 100)  # Avoid x = 0 for log(x)

# Calculate y values for the first function
y1 <- -log(x) * (x^2) / n

# Calculate y values for the second function
y2 <- (x - x^2) / n

# Create data frame
df <- data.frame(x = rep(x, 2), y = c(y1, y2), func = rep(c("y1", "y2"), each = length(x)))

# Create the plot
ggplot(df, aes(x = x, y = y, color = func)) +
  geom_line() +
  labs(x = "x", y = "y", title = "Plot of y = -log(x) * (x^2)/n and y = (x-x^2)/n") +
  theme_minimal()
```

Plot of y = –log(x) * (x^2)/n and y = (x–x^2)/n