Untitled

$$\mu \neq$$

type type $\mu = 0$

```r
library(knitr)
```

Warning: package 'knitr' was built under R version 4.2.3

```r
# Create a data frame
raw_data_with_means <- data.frame(
  Column1 = c(1, 2, 3),
  Column2 = c(4, 5, 6),
  Column3 = c("$\\bar{x}$", "$\\sum y$", "$\\alpha + \\beta$")
)

# Print the table (renders plain text in the console)
print(raw_data_with_means)
```

```
  Column1 Column2             Column3
1       1       4          $\\bar{x}$
2       2       5           $\\sum y$
3       3       6 $\\alpha + \\beta$
```

```r
# Render as a LaTeX table in R Markdown
kable(raw_data_with_means, format = "latex", escape = FALSE)
```

Column1	Column2	Column3
1	4	$\bar{x}$
2	5	$\sum y$
3	6	$\alpha + \beta$

```r
library(kableExtra)
```

Warning: package 'kableExtra' was built under R version 4.2.3

```r
# Create raw data
beers <- c("Sierra(Pale Ale)", "Coors(Generic)", "Guinness(Dark)", "Pliny(IPA)")
Nolan <- c(NA, 6, 5.5, 3)
Jon <- c(5.5, 6, 3.5, NA)
Beni <- c(7, NA, 4, 8.5)
Zach <- c(2.5, 6.5, NA, 2)

# Create initial data frame
raw_data <- data.frame(Beers = beers, Nolan, Jon, Beni, Zach)

# Calculate column and row means
col_means <- round(colMeans(raw_data[, -1], na.rm = TRUE), 2)
row_means <- round(apply(raw_data[, -1], 1, mean, na.rm = TRUE), 2)

# Add means to the data
raw_data_with_col_means <- rbind(raw_data, c("Column Means", col_means))
raw_data_with_means <- cbind(raw_data_with_col_means, Row_Mean = c(row_means, NA))

# Add LaTeX math expression explicitly
raw_data_with_means[5, 6] <- "$\\hat{\\mu} = 5$"

# Generate table with LaTeX rendering
raw_data_with_means %>%
  kable(
    caption = "Beer Ratings by Participant",
    col.names = c("Beers", "Nolan", "Jon", "Beni", "Zach", "Row Means"),
    align = "c",
    format = "latex",
    escape = FALSE  # Allow LaTeX math expressions
  ) %>%
  column_spec(6, border_left = TRUE) %>%
  row_spec(4, hline_after = TRUE)
```

Table 1: Beer Ratings by Participant

Beers	Nolan	Jon	Beni	Zach	Row Means
Sierra(Pale Ale)	NA	5.5	7	2.5	5
Coors(Generic)	6	6	NA	6.5	6.17
Guinness(Dark)	5.5	3.5	4	NA	4.33
Pliny(IPA)	3	NA	8.5	2	4.5
Column Means	4.83	5	6.5	3.67	$\widehat{\mu} = 5$