

# MLARPII week 1

A.J.Vijlbrief

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# **1    Equation**

$$E = M * C^2$$

$$y = aX + b$$

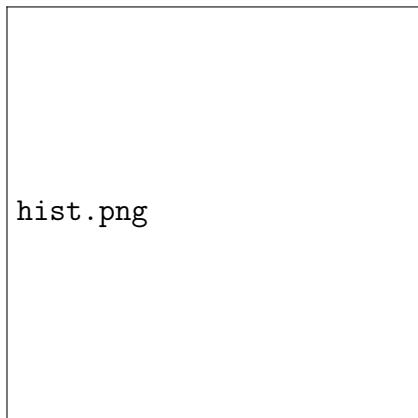
## **1.1   Another Equation**

$$\cos 90^\circ + \sin 90^\circ = ?$$

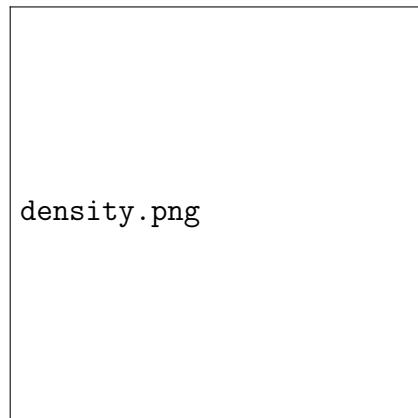
## 2 R plots

Figure 1 shows the different plots that I had to put in for the assignment. I ended up doing it using subfigures. Figure 1 can be found on page 2. Table 1 shows the table that I had to make and can be found on page 3

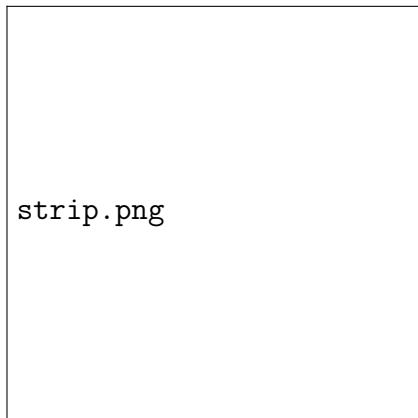
### 2.1 Plots



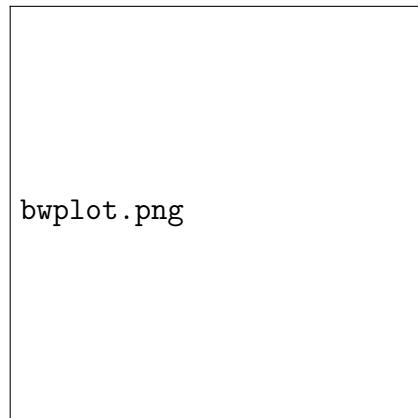
(a) Histogram



(b) Densityplot



(c) Stripplot



(d) Boxplot

Figure 1: Different plots of the same data, sometimes transformed. No particular objective other than it being an exercise.

### 2.2 Table

Apparently the \clearpage command works differently and clears a page after 'floats' which is what figures and tables are. I wanted my fairytale to

Table 1: The same data, but now in a table. Only the first nine rows are displayed.

	data	squared1	squared2	exponent
1	-0.56	0.31	0.31	0.57
2	-0.23	0.05	0.05	0.79
3	1.56	2.43	2.43	4.75
4	0.07	0.00	0.00	1.07
5	0.13	0.02	0.02	1.14
6	1.72	2.94	2.94	5.56
7	0.46	0.21	0.21	1.59
8	-1.27	1.60	1.60	0.28
9	-0.69	0.47	0.47	0.50

start on a new page and \newpage didn't work so I tried this instead.

### 3 Fairytale

The Enchanted Garden and the Luminous Dove Magical Dove

Once, in a land covered by mists and whispers, there lay an enchanting garden hidden behind a great stone wall. No one knew who had built the wall or why, but one thing was for certain – nobody had ever seen what was behind it.

A little girl named Clara boy named Peter lived in a village nearby. Fueled Fuelled by curiosity and tales of magical creatures, she-he often dreamt of the wonders that the walled garden might hold. One day, unable to resist its lure any longer, she-he decided to find a way in.

As she-he approached the towering stone barrier, she-he noticed a tiny gap just big enough for her-him to peek through. The garden inside was bathed in a shimmering golden light, unlike any she-he had ever seen. To her-his amazement, in the center stood a magnificent tree with leaves that glittered as if they were made of starlight. And resting on one of its branches was a dove, glowing with the same luminous hue.

Before she-he could process this beautiful sight, the dove spoke to her-his in a voice as soft as the wind, "To enter the garden, one must share a pure and selfless desire."

Clara, with her Peter, with his heart pounding, whispered her-his wish, "I wish for everyone in my village to be happy and free from suffering."

The massive stone door, seemingly of its own accord, began to open. The luminous dove flew to Clara-Peter and rested on her-his shoulder. "Your wish is genuine, and so you may enter," it said.

Inside, the garden was more wondrous than Clara-Peter had ever imagined. Flowers sang in soft harmonies, and a gentle breeze carried the sweetest of fragrances. Every step she-he took made the grass shimmer with colors she'd never seen before.

The dove explained that this was an Enchanted Garden, a place where one's purest wishes could come true. But, there was a catch. To make her-his wish a reality, Clara-Peter had to plant a seed from the magical tree in her-his village and care for it with unwavering love and dedication.

Clara-Peter accepted the challenge. With the seed safely tucked in her-his pocket and the dove guiding her, she returned to her he returned to his village.

Years went by, and with ClaraPeter's love, the seed grew into a magnificent tree, similar to the one in the Enchanted Garden. With its growth, joy and happiness blossomed in the village like never before.

Clara's selfless wish not only transformed her village but also changed her. She became known as the Keeper of Joy, teaching future generations

~~about love, compassion, and the magic of selfless wishes.~~

And so, in a village once shadowed by mystery, there stood a tree that bore witness to the pure heart of a ~~girl and her boy and his~~ luminous companion, reminding everyone that magic was always just a wish away.