As of December 15, 2022
P(A | B)

$$x^2 + y^2 = z^2$$

hello world. ~~strike out~~
SMALL CAPS
Is this blue.:

```
file <- "/home/jim/code/publish_project/MATH/100_math_examles.md"
```

PURPOSE: Collect examples of math/latex here: vectors, equations, align, symbols etc.

<!– This is comment to pandoc
–>

“‘ Exercise 2.1 (Comparing the prior and posterior) For each scenario below, you’re given a pair of events, A and B. Explain what you believe to be the relationship between the posterior and prior probabilities of B: P(B|A)>P(B) or P(B|A)<P(B) .

A (a) A = you just finished reading Lambda Literary Award-winning author Nicole Dennis-Benn’s first novel, and you enjoyed it!

B = you will also enjoy Benn’s newest novel.

A = it’s 0 degrees Fahrenheit in Minnesota on a January day. B = it will be 60 degrees tomorrow.

A = the authors only got 3 hours of sleep last night. B = the authors make several typos in their writing today. A = your friend includes three hashtags in their tweet. B = the tweet gets retweeted. “‘

We are told A, and asked to consider B: P(B | A) Prior is A. P(B | A) = L(A | B)

(b) Prior is P(A) Posterior is P(B | A) Of all possible outcomes, B, seems that P(B | A) is quite low.

# 1 Terms & Definitions

Y outcomes, random variable, based upon X inputs, model parameters Because of error, we refer to P(Y | X, $\pi$), where $\pi$is model parameter

# 2 linear regression