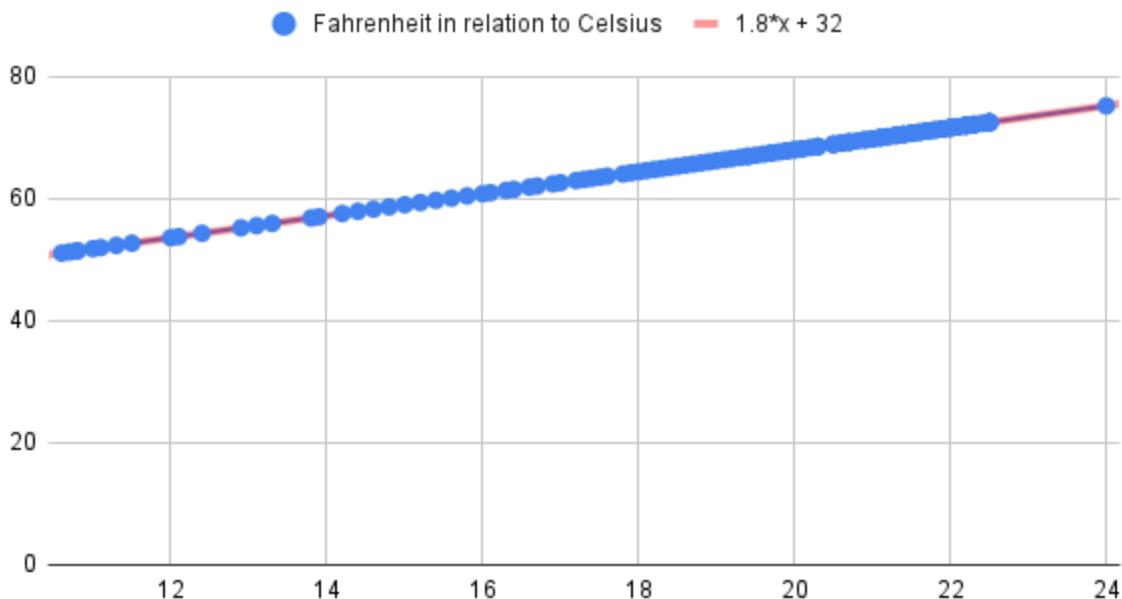


# Lab 10- Temperature in Color

1. What is the graph of Celsius vs Fahrenheit?

Celsius (x) vs Fahrenheit (y)



- i. What is the equation of the line of best fit?

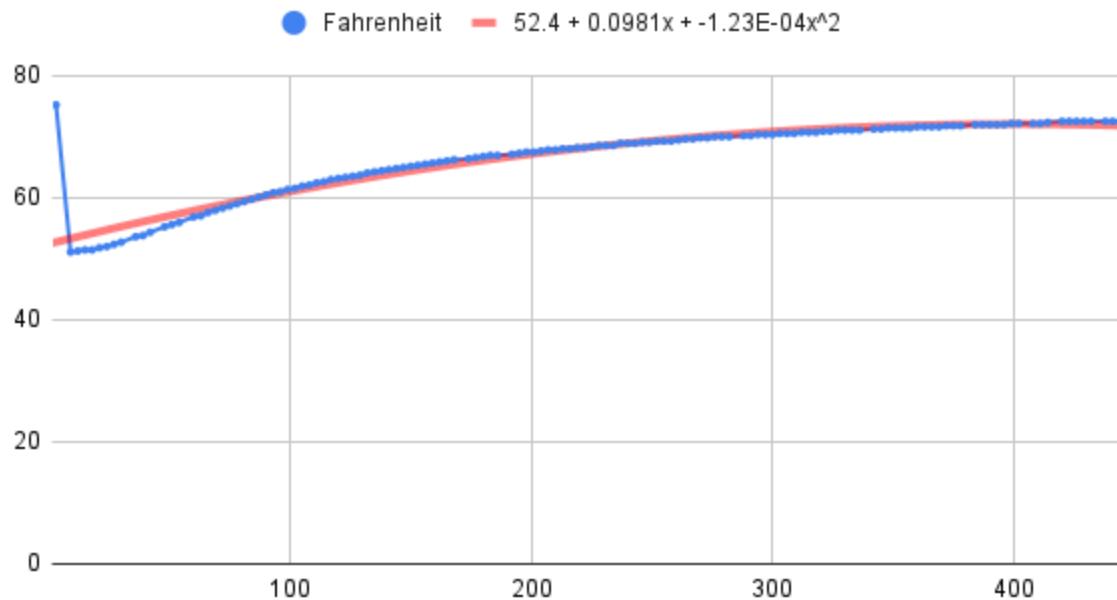
the line of best fit is  $F = 1.8 * C + 32$

- ii. Why does this make sense based on what we know about Celsius and Fahrenheit?

this makes sense because this is exactly the equation I used in my calculation as well as the constant being +32 because if 0 degree Celsius is equal to 32 degree Fahrenheit

2. What is the Graph of Fahrenheit over time?

Fahrenheit (y) over Time (x) in seconds



i. What kind of equation best fits our graph?

A quadratic represents it best, the one in the legend is formatted as a polynomial however

ii. What is the equation to the line of best fit?

The equation to the line of best fit is rounded to roughly  $-0.0001x^2 + 0.09x + 52$

iii. Why does this make sense for representing temperature?

It makes sense because as temperature gets closer to equilibrium of room temperature, the rate of change begins to slow down, this is shown by the negative 'a' in the quadratic equation