



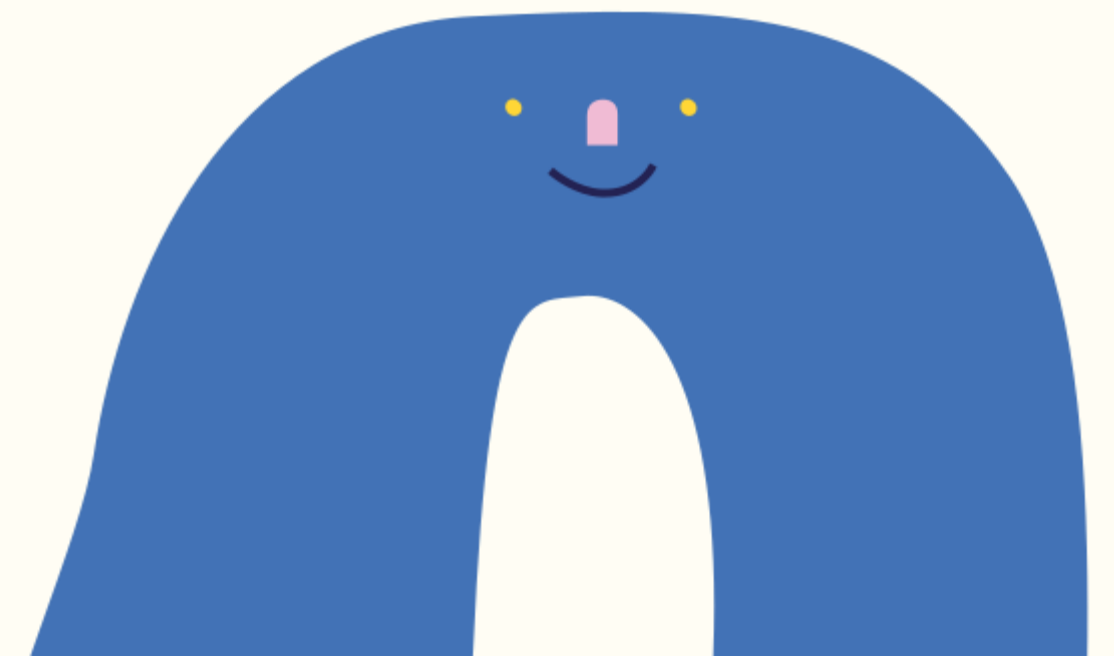
# BABY BEAM

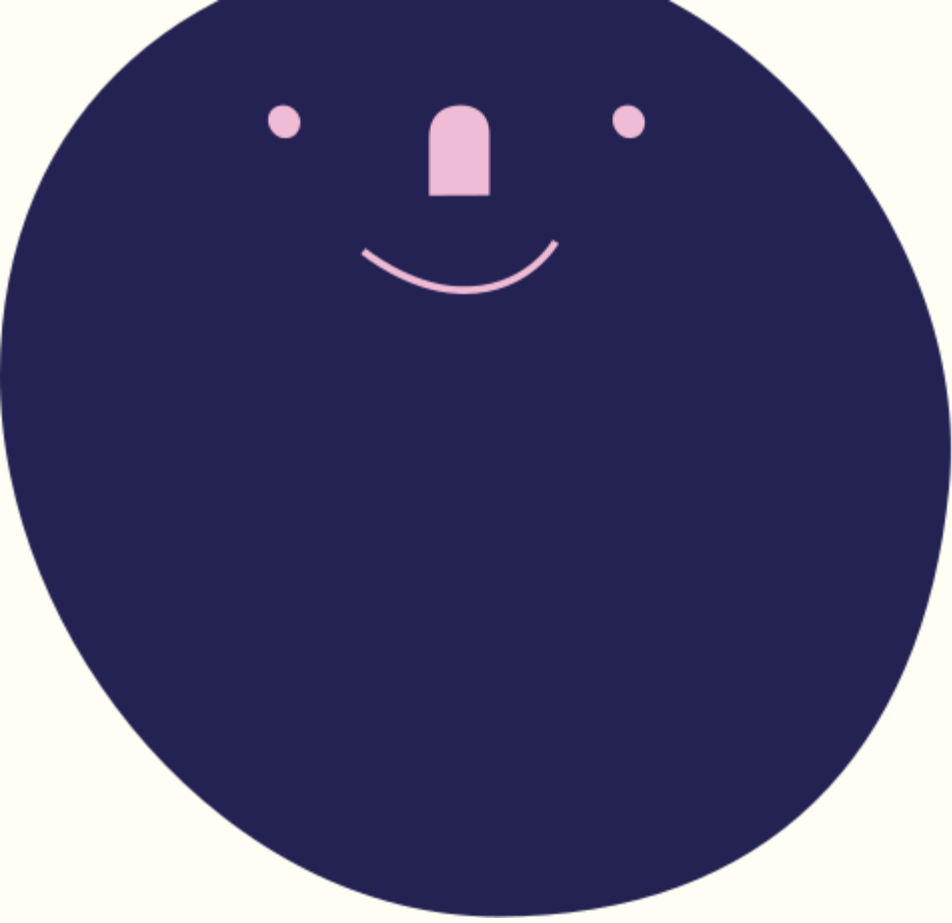


“Child's Health and Growth Tracking Application”



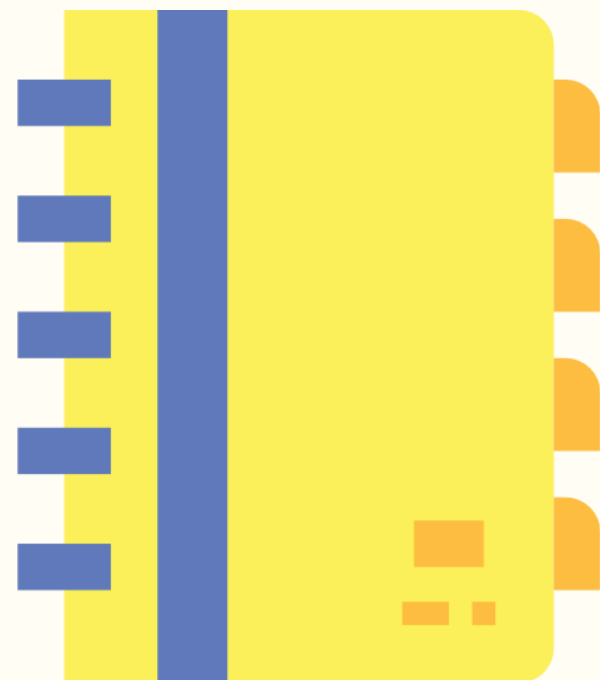
Child Care Convenience



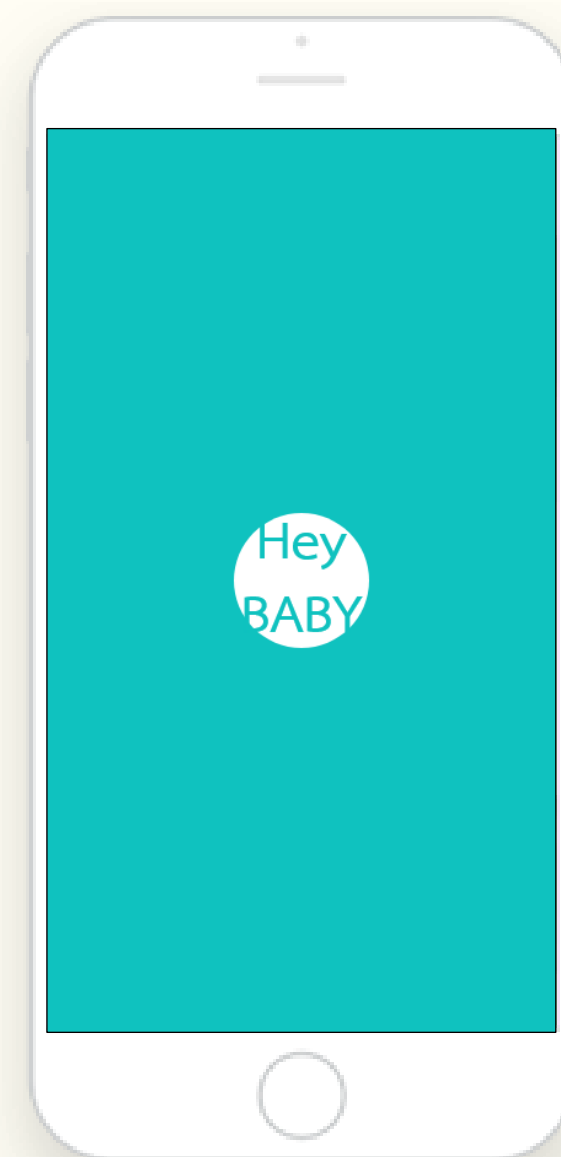


# RATIONALE

Child Care Convenience



Recording  
Tracking  
Notification



# OBJECTIVES



## Analysis

Length/Height

Weight

Head Circumference

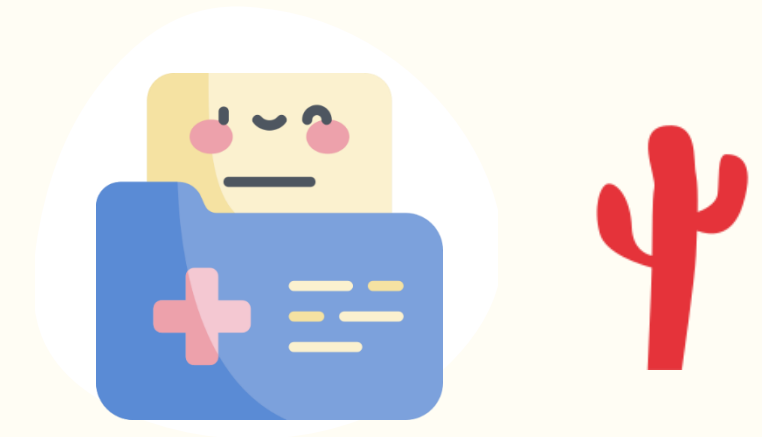


## Tracking

Child Development

Vaccine

Abnormal Symptoms



## Recording

Health

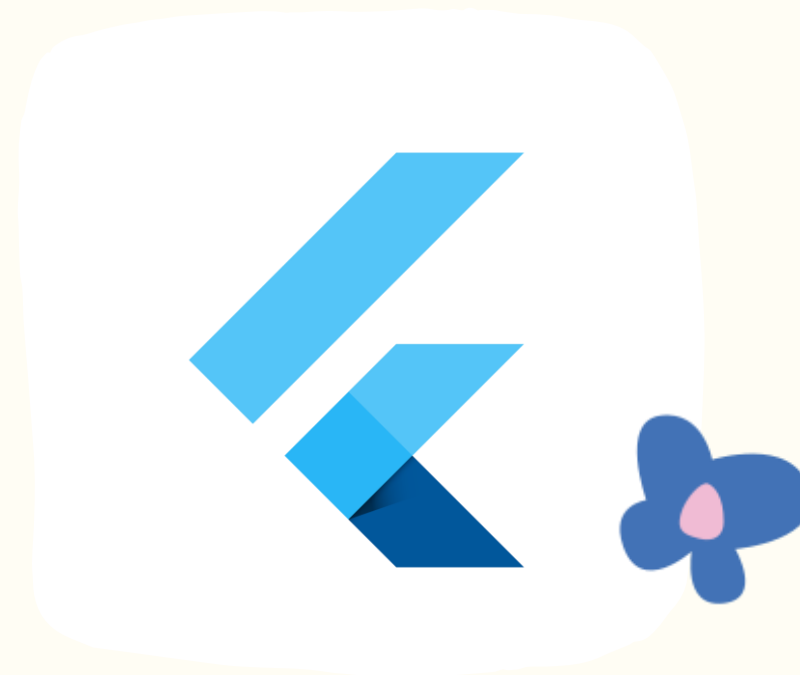
Medical History

Health Conditions

# TOOLS



Visual Studio Code

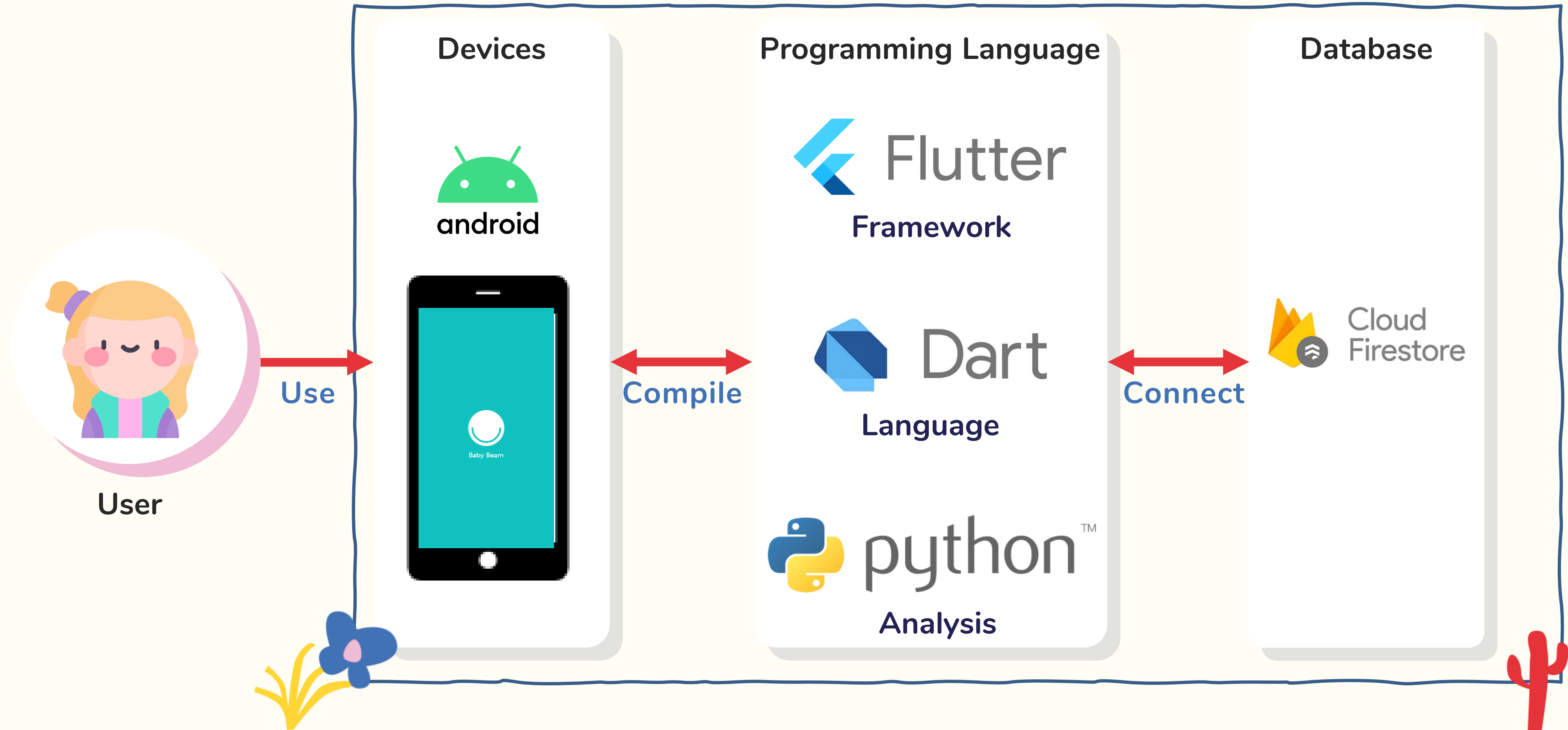


Flutter



Firebase

# ARCHITECTURE DIAGRAM



# THEORY OF DATA



## Health Information

Recording and tracking weight function for children 0 - 10 years

Height/BMI function for children 0 - 19 years

Head circumference tracking function for children 0 – 5 years

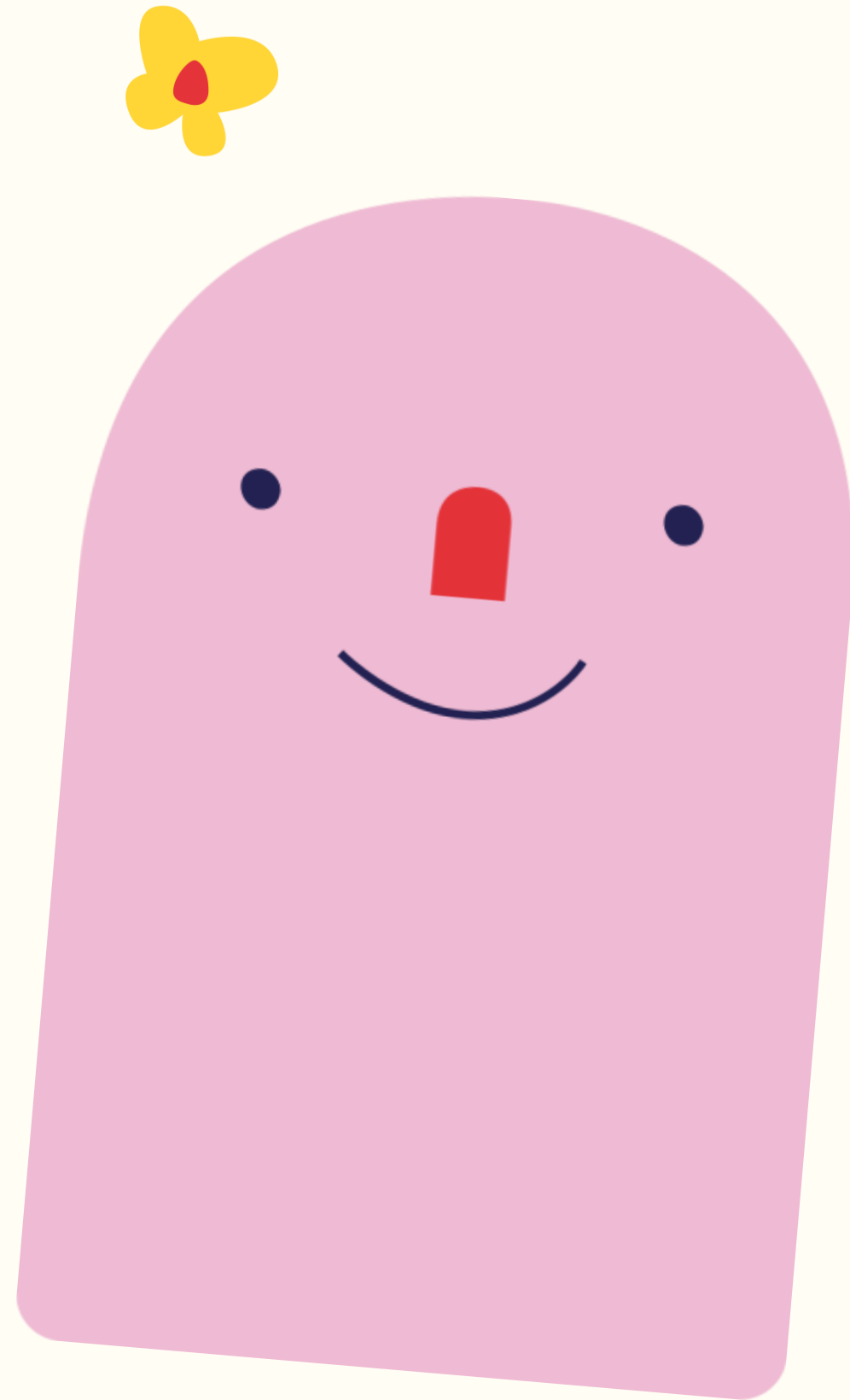
## Child Development

Child development tracking function for children 0 – 6 years

## Vaccine

Vaccine tracking function for children function for children 0 – 12 years





# DATA ANALYTIC

## Personal Health with Predictive Analytics

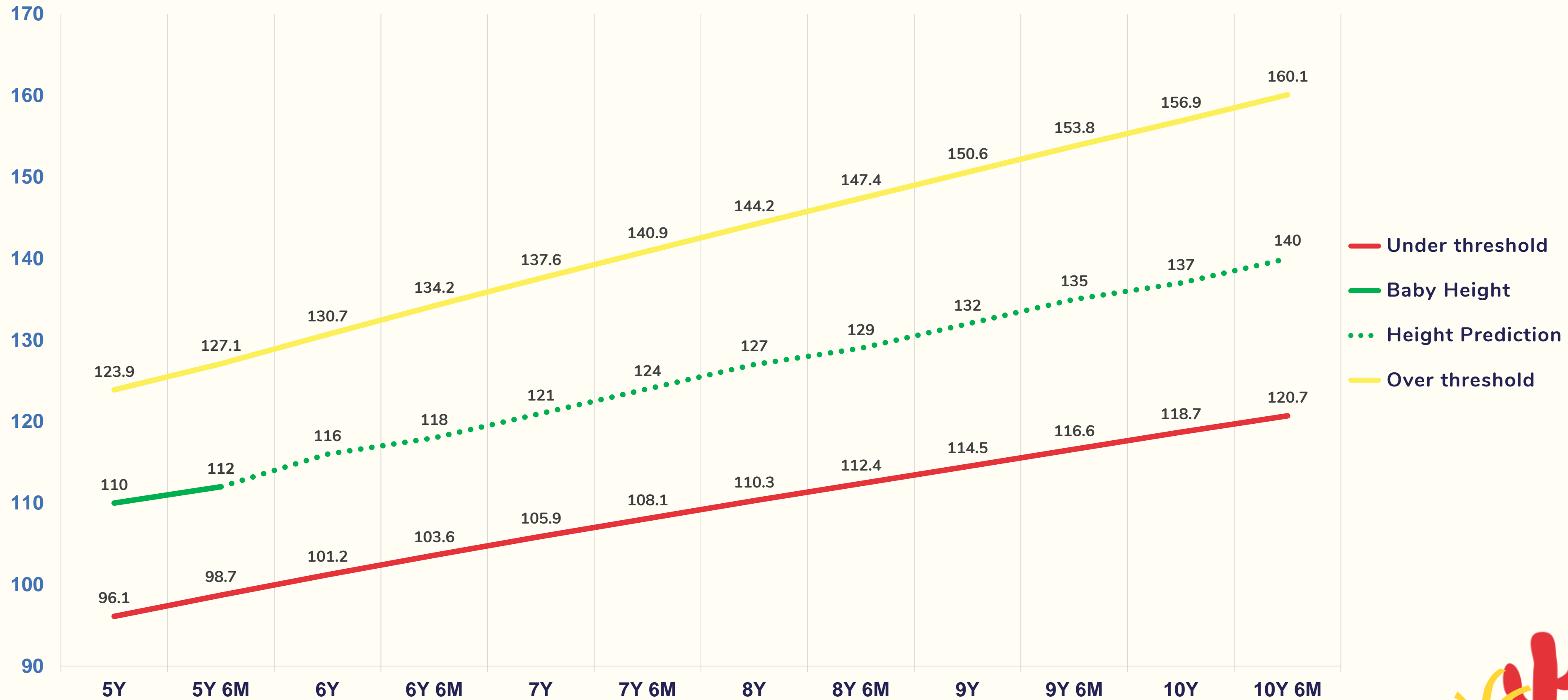
Length/Height

Weight

Head Circumference

BMI

# HEIGHT PREDICTION

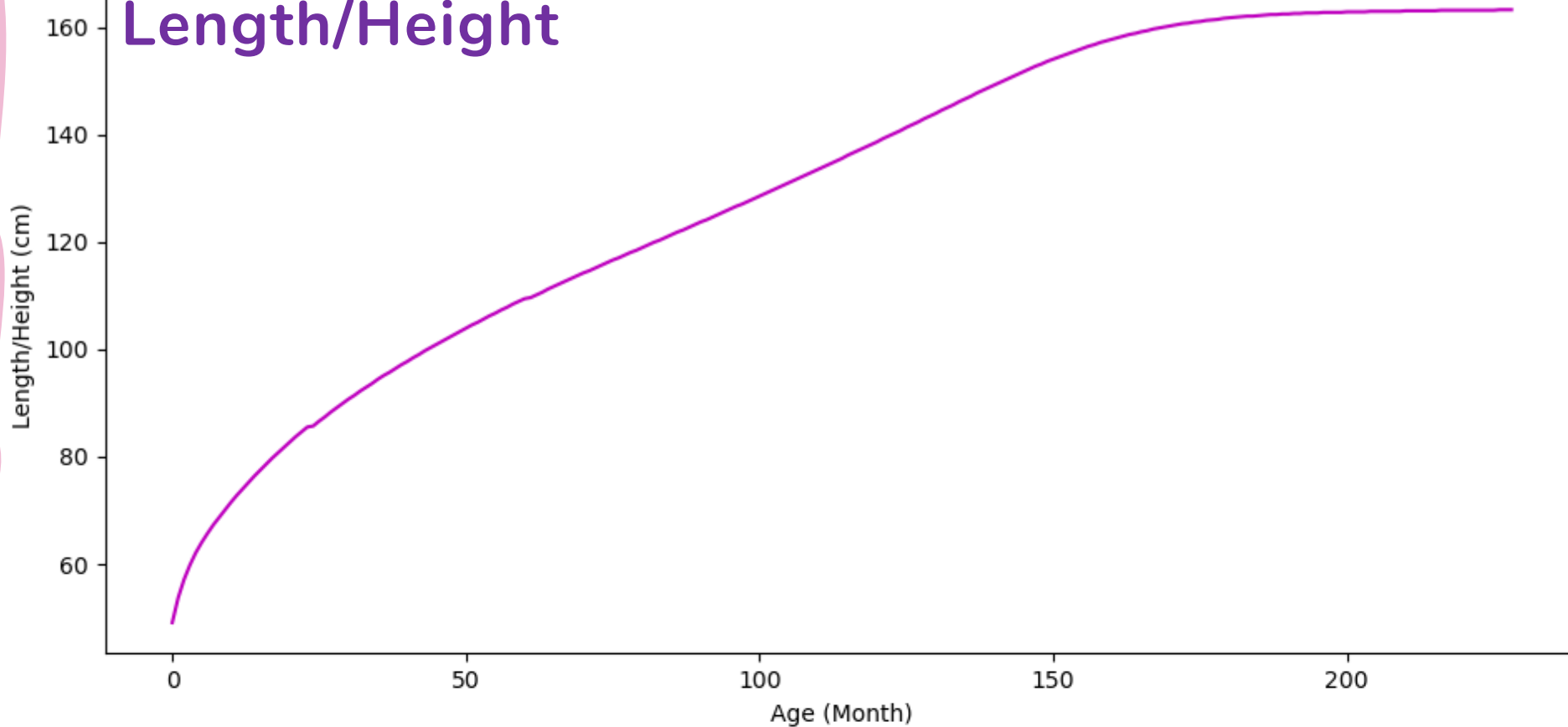




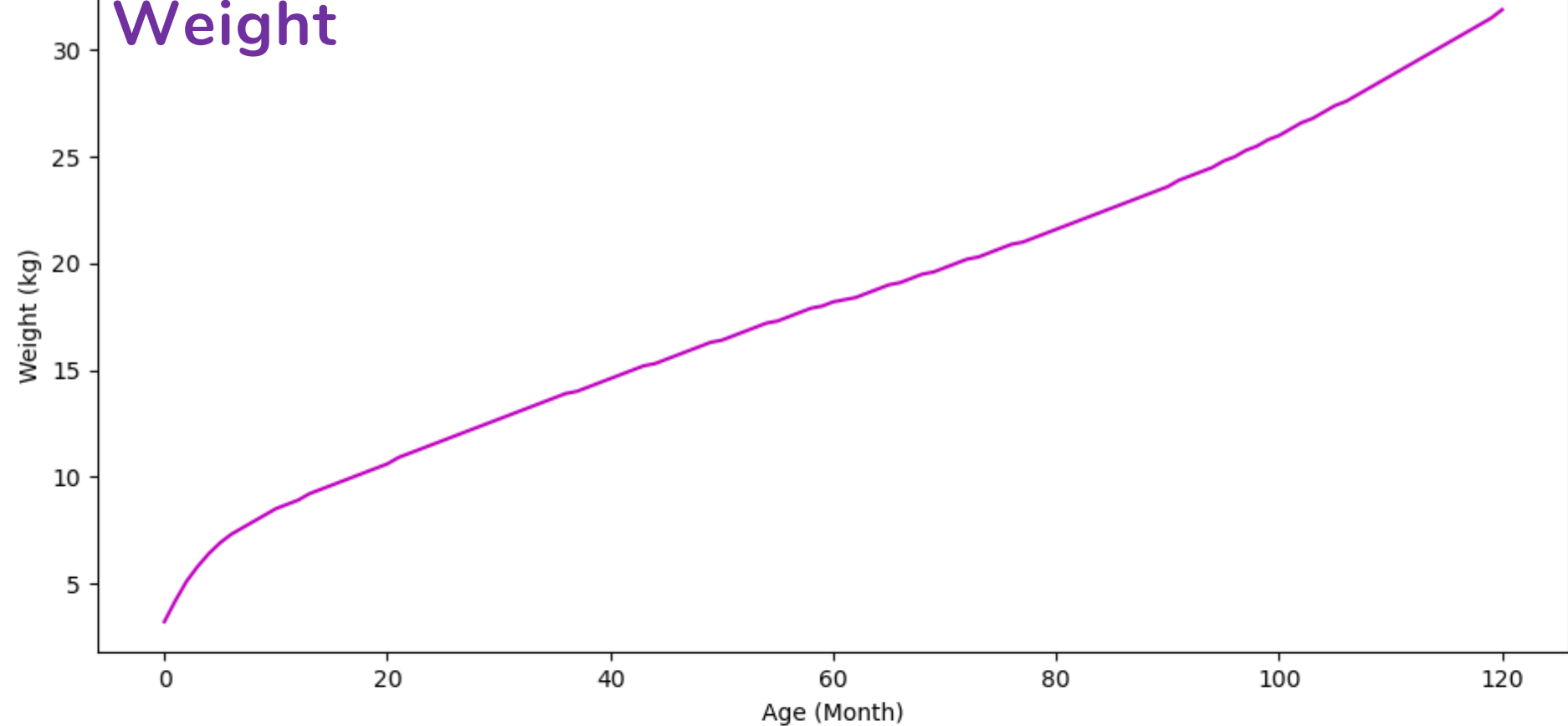
# GROWTH CHART FOR GIRLS



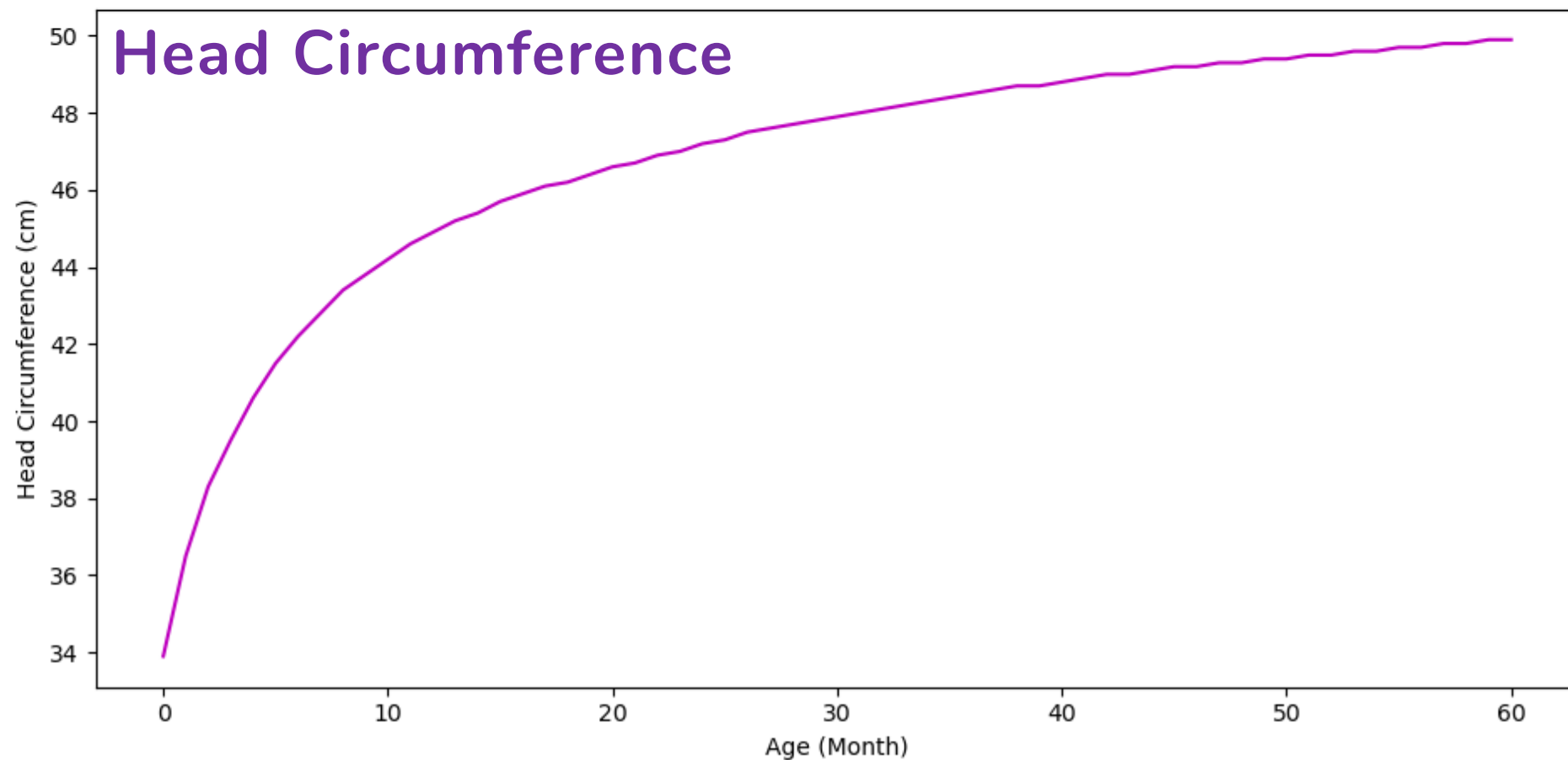
## Length/Height



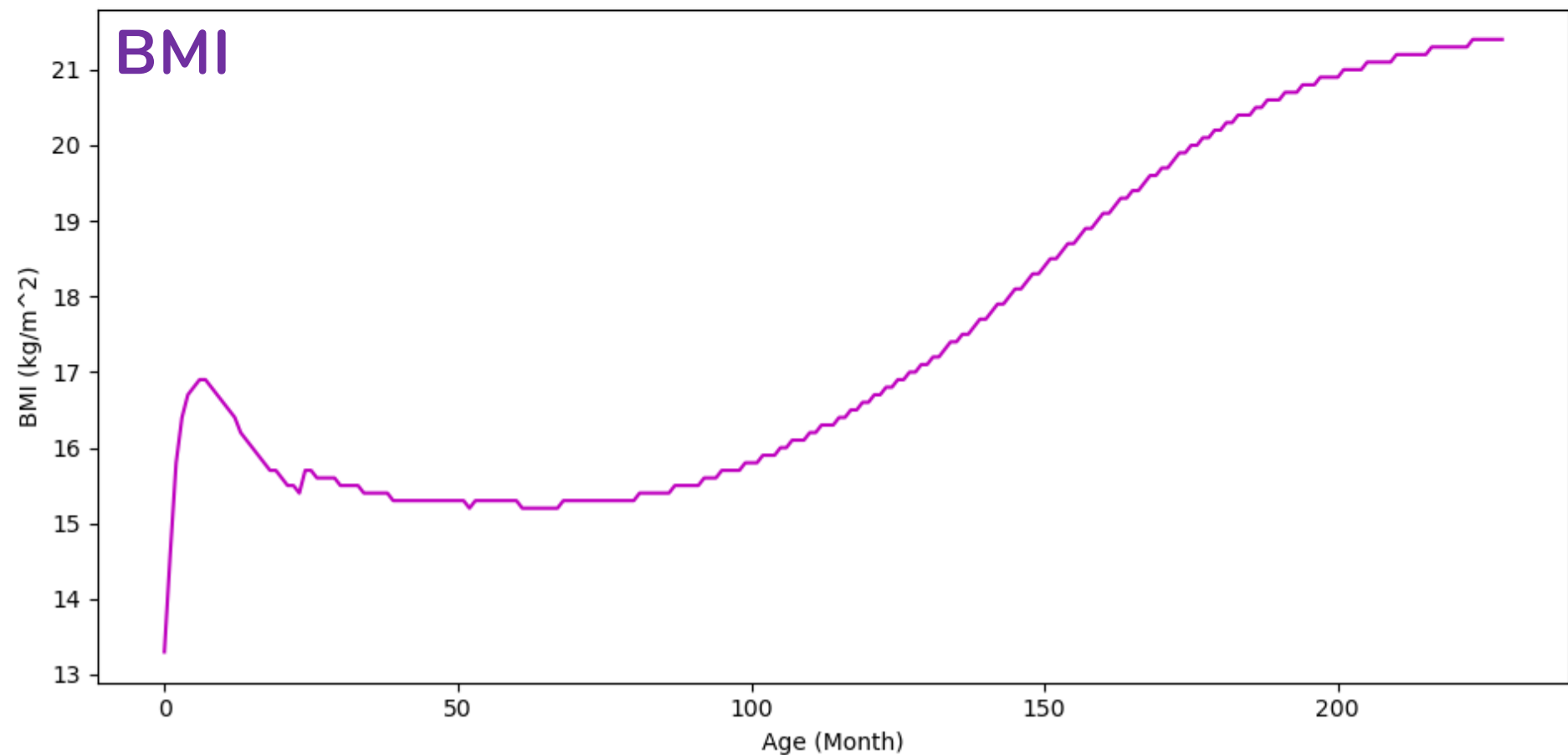
## Weight



## Head Circumference



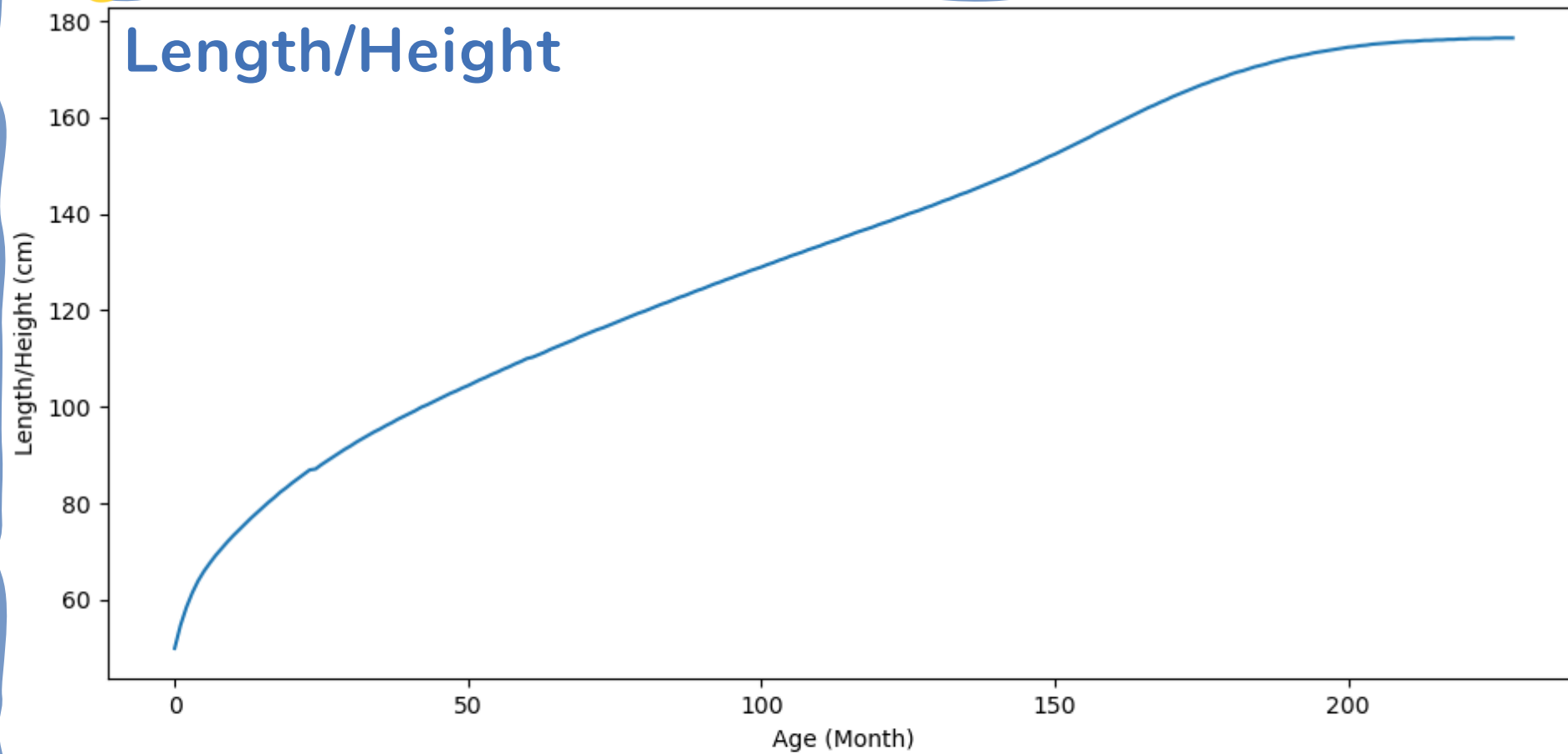
## BMI



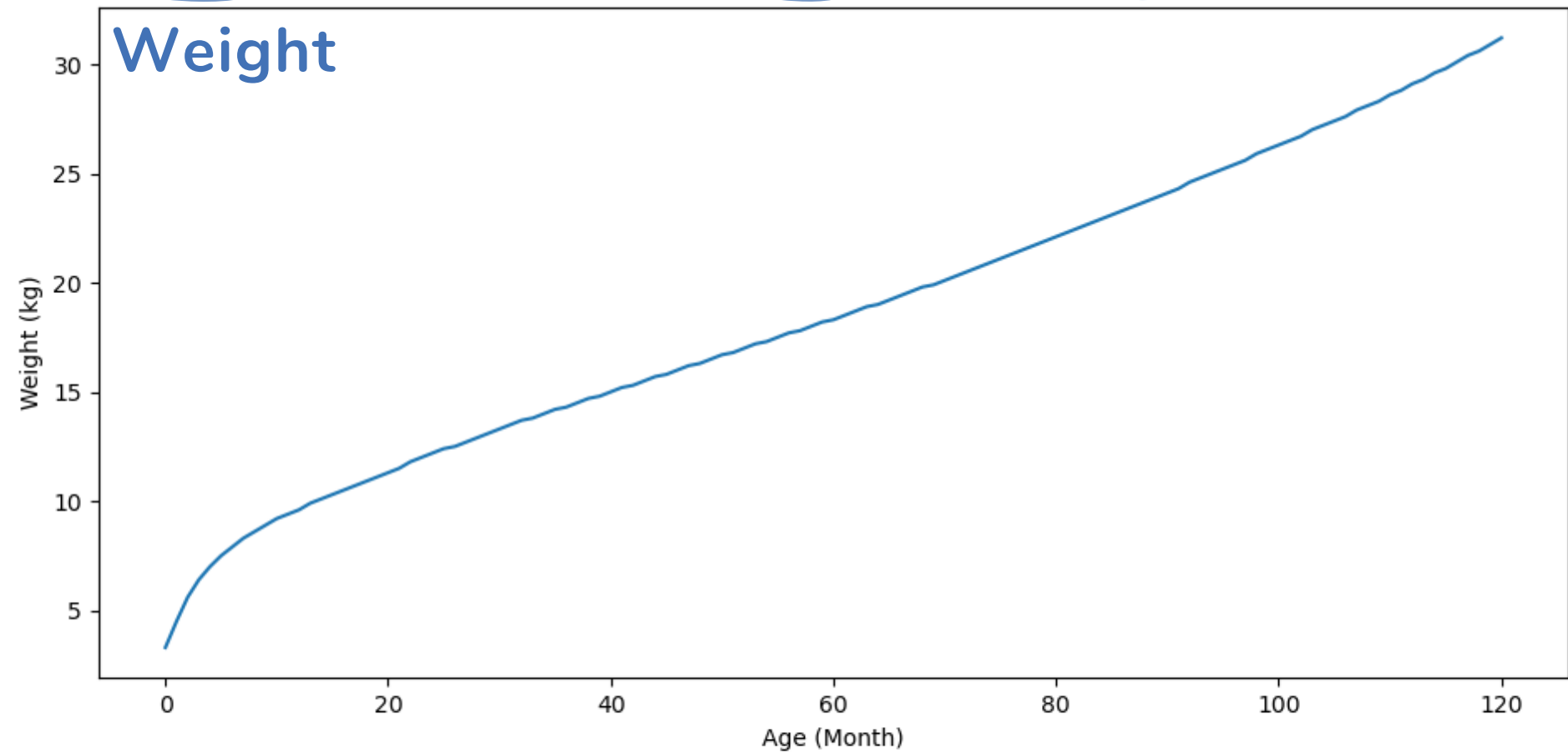
# GROWTH CHART FOR BOYS



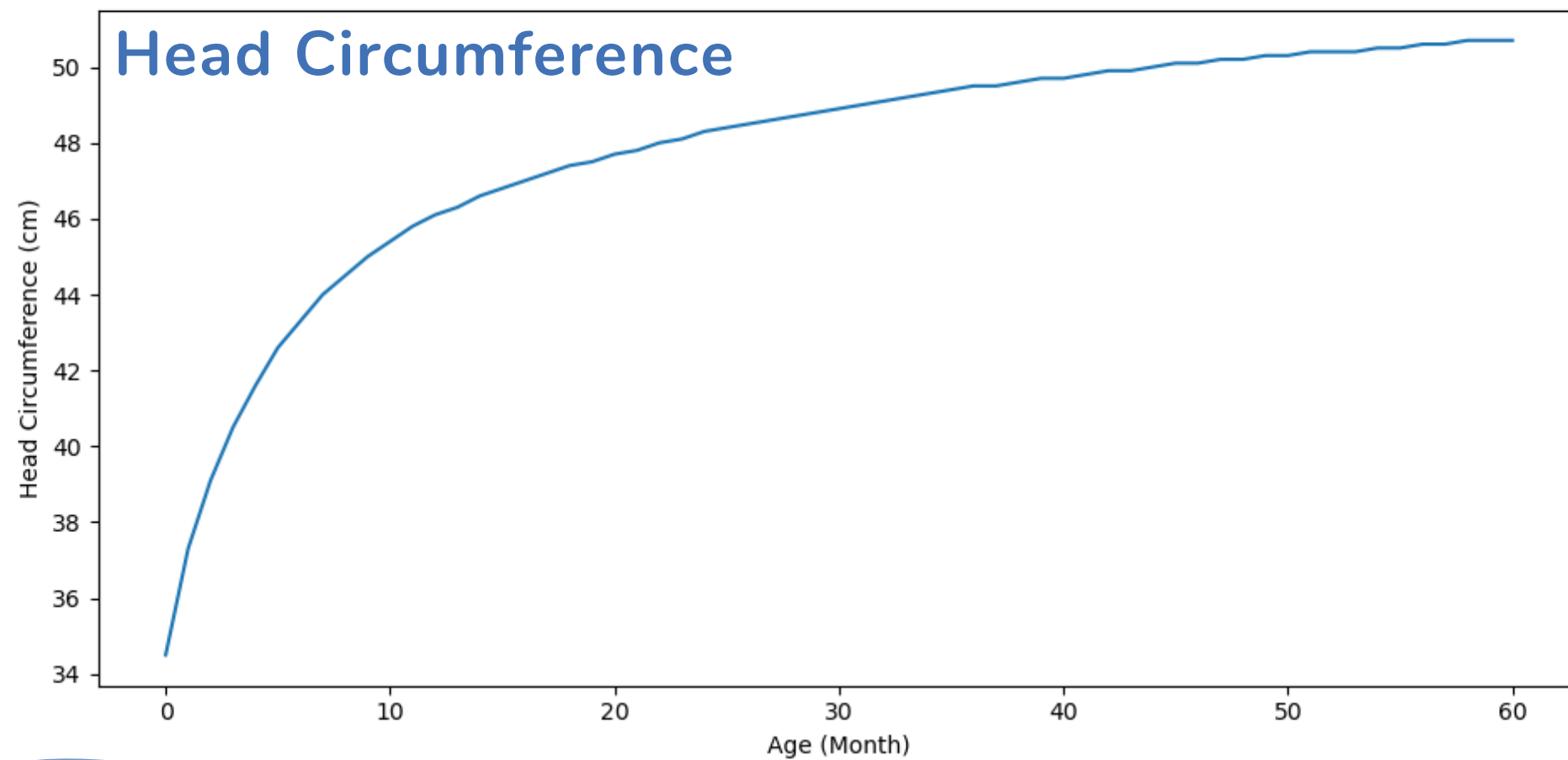
## Length/Height



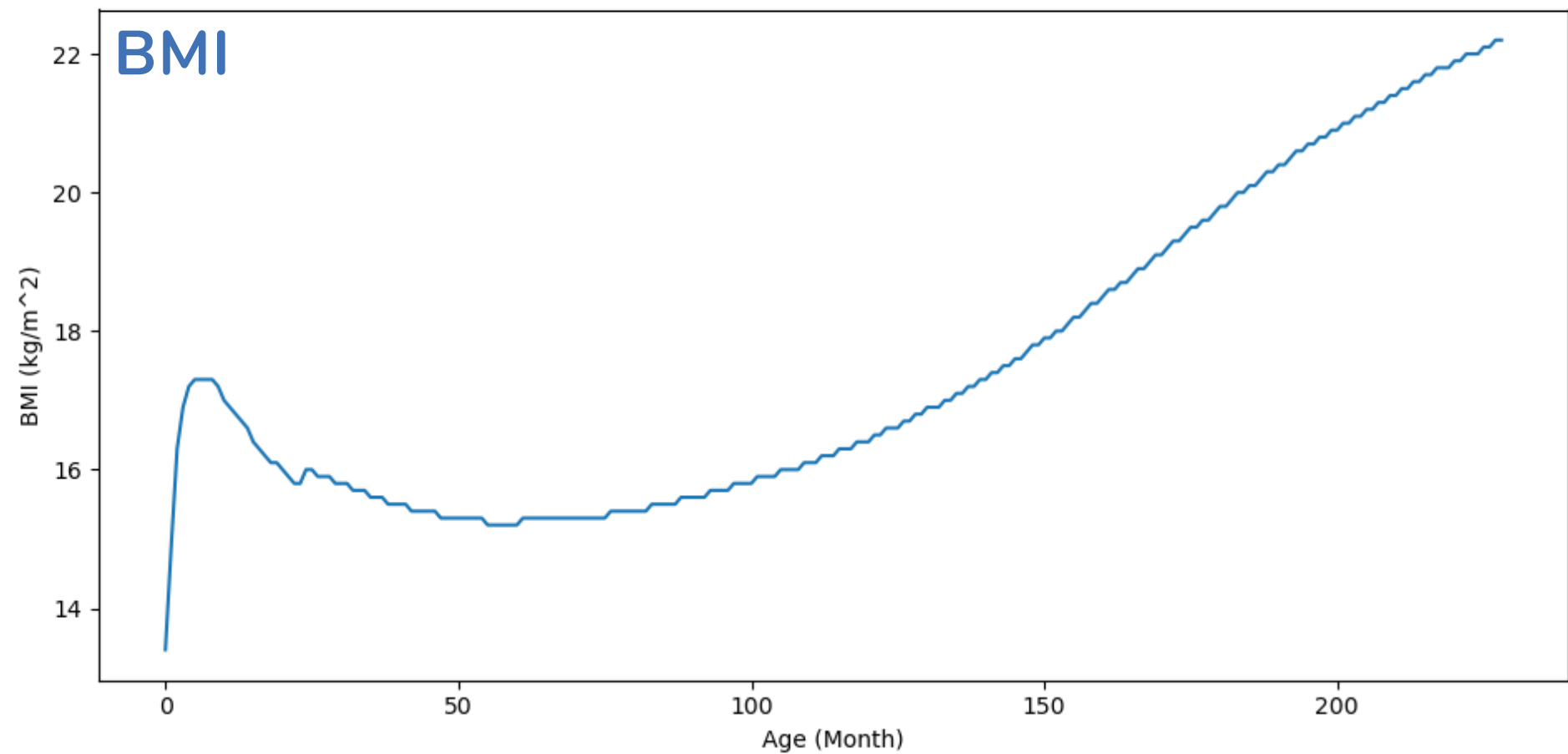
## Weight



## Head Circumference

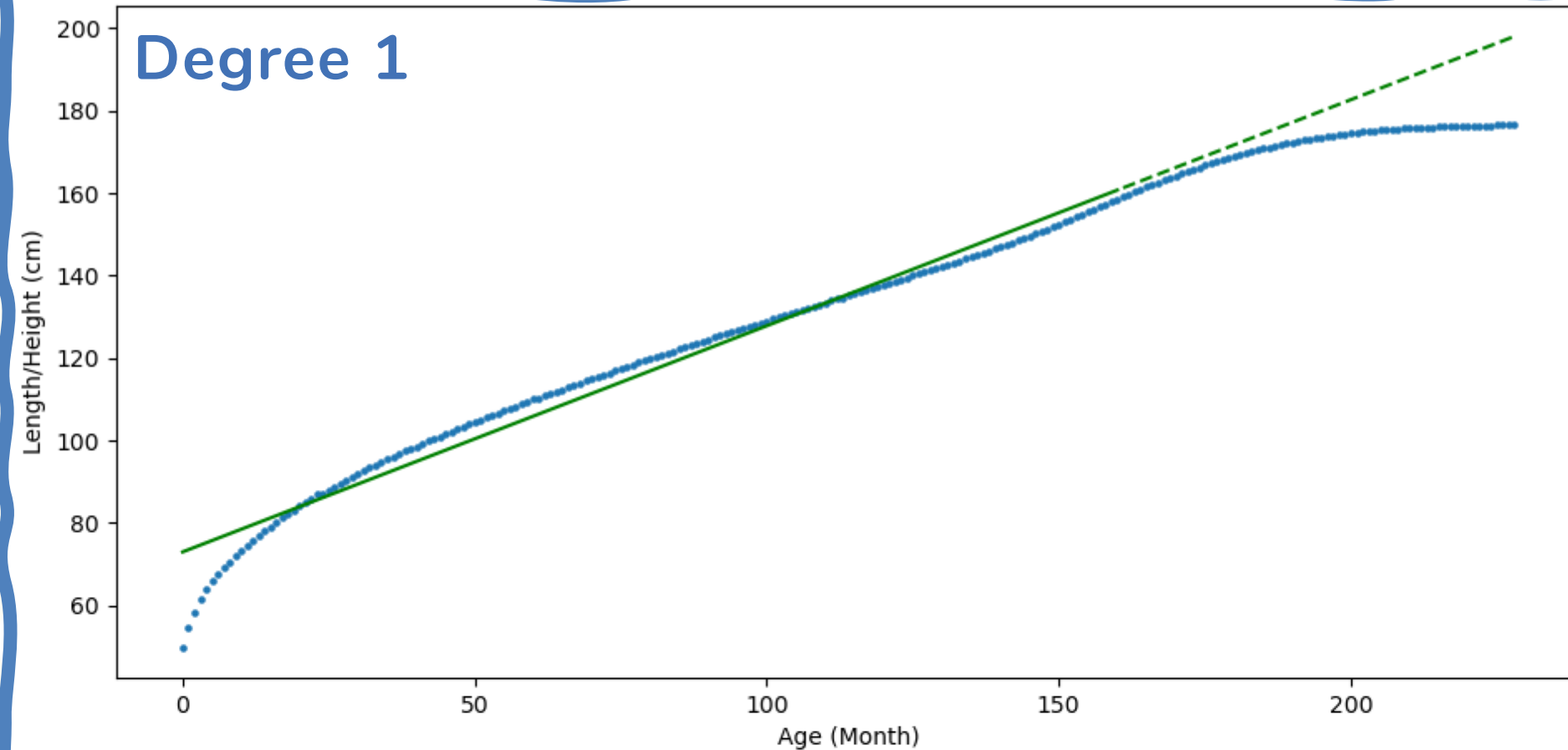


## BMI

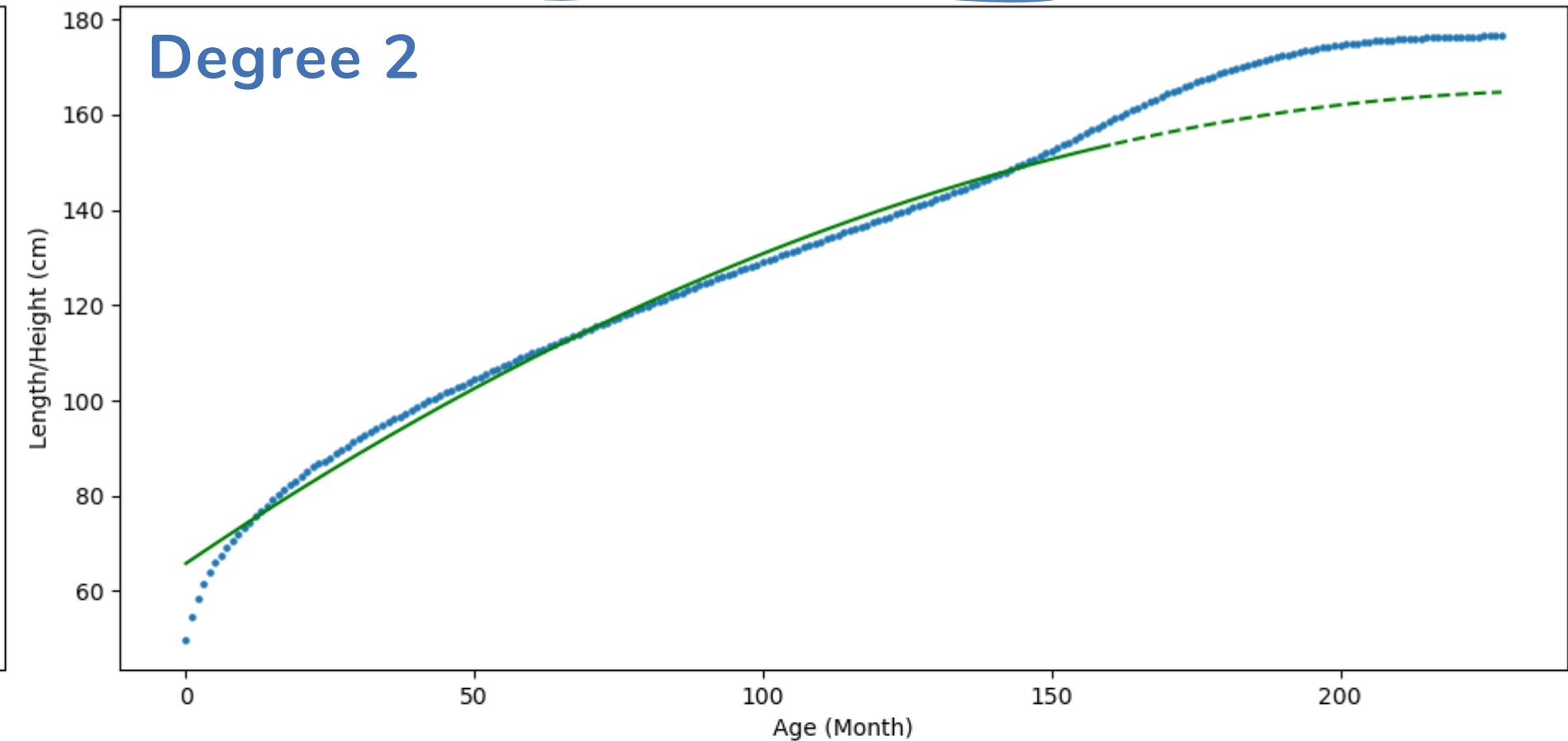


# HEIGHT PREDICTION FOR BOY

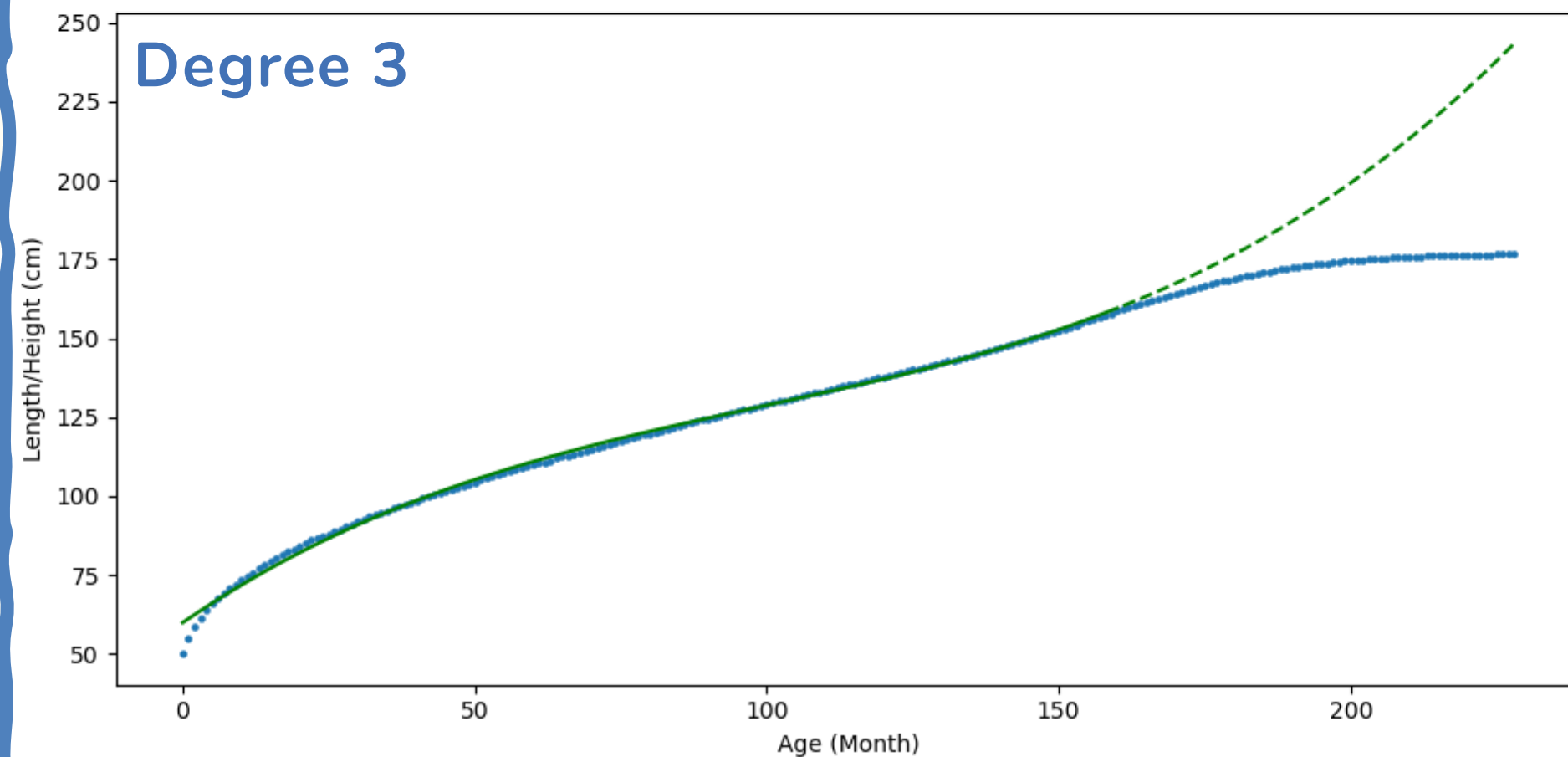
Degree 1



Degree 2



Degree 3



Polynomial Degree 1

Error : 10075.937395514444

Polynomial Degree 2


Error : 9567.000650841652

Polynomial Degree 3

Error : 66784.72700807691

70% Train set  
30% Test set


# AGE RANGE PREDICTION



Birth to 2 years  
2 to 5 years


Head Circumference

Birth to 2 years  
2 to 5 years  
5 to 10 years



Weight

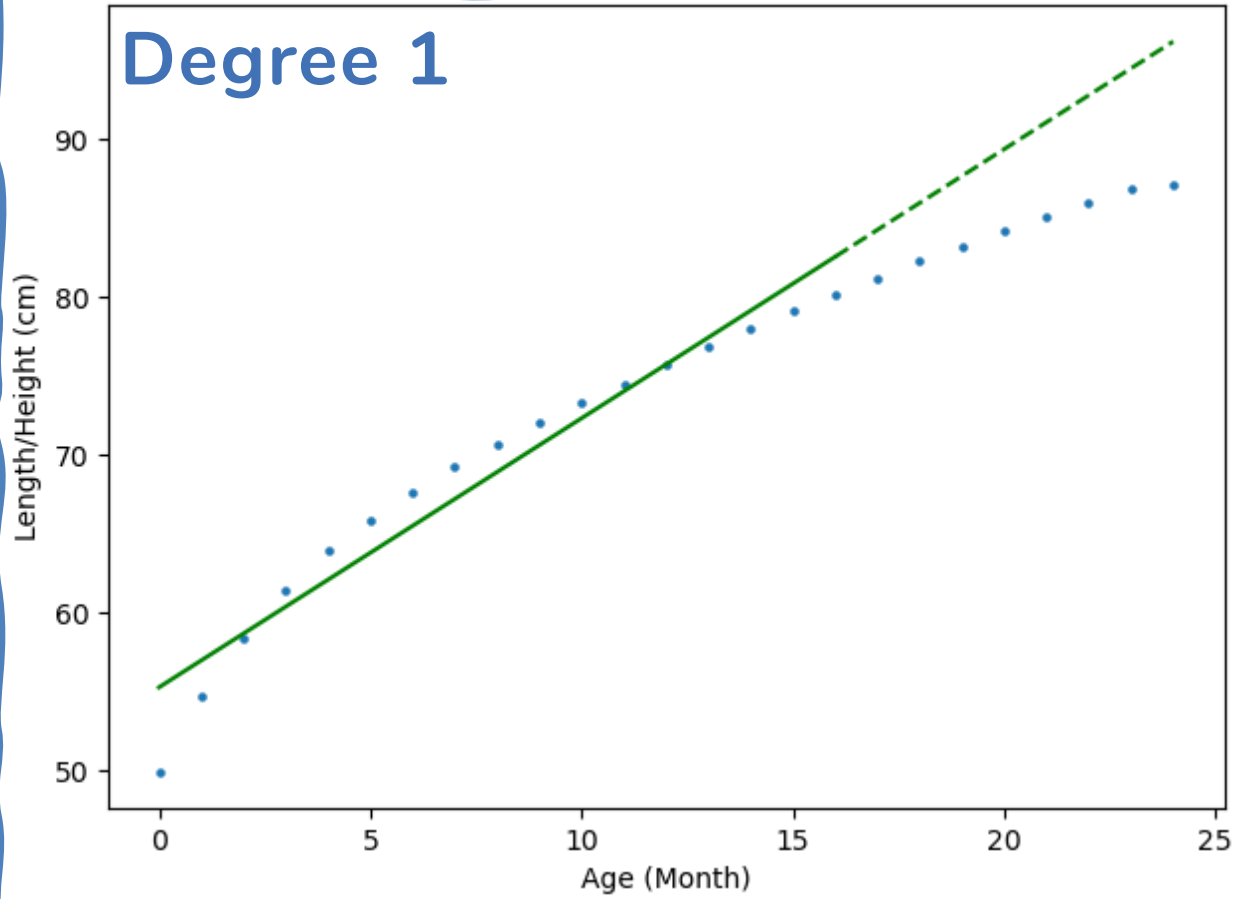
Birth to 2 years  
2 to 5 years  
5 to 19 years



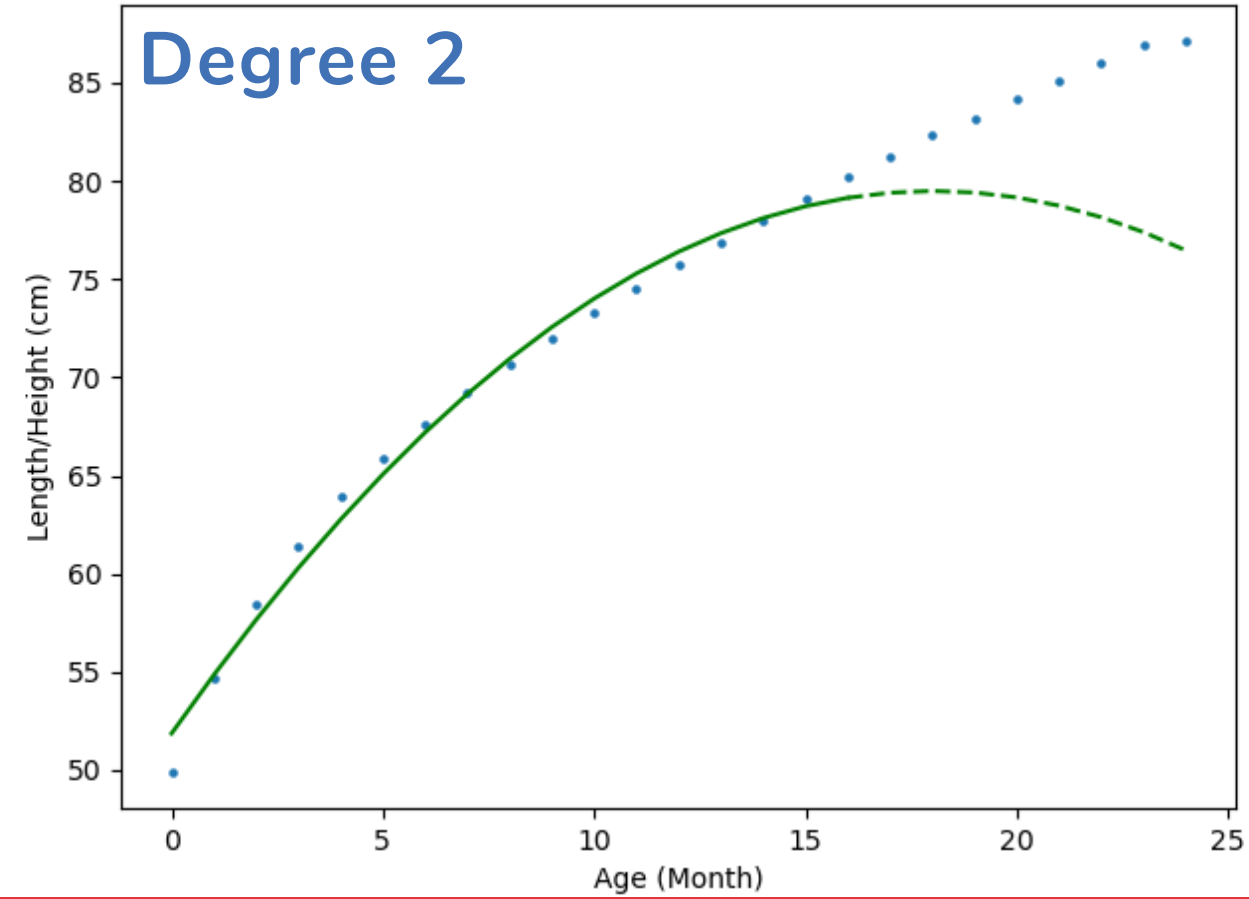
Length/Height  
&  
BMI

# BIRTH TO 2 YEARS

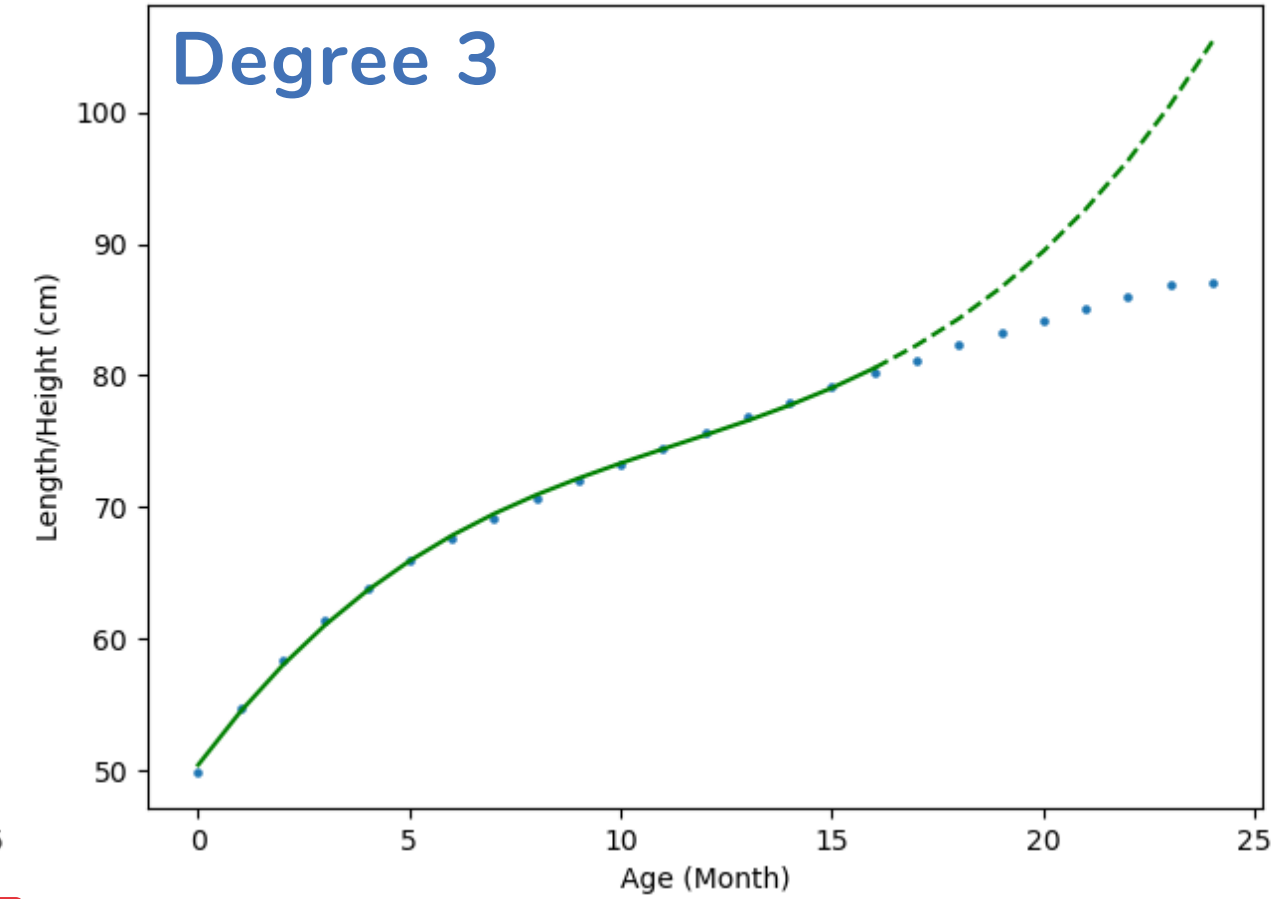
Degree 1



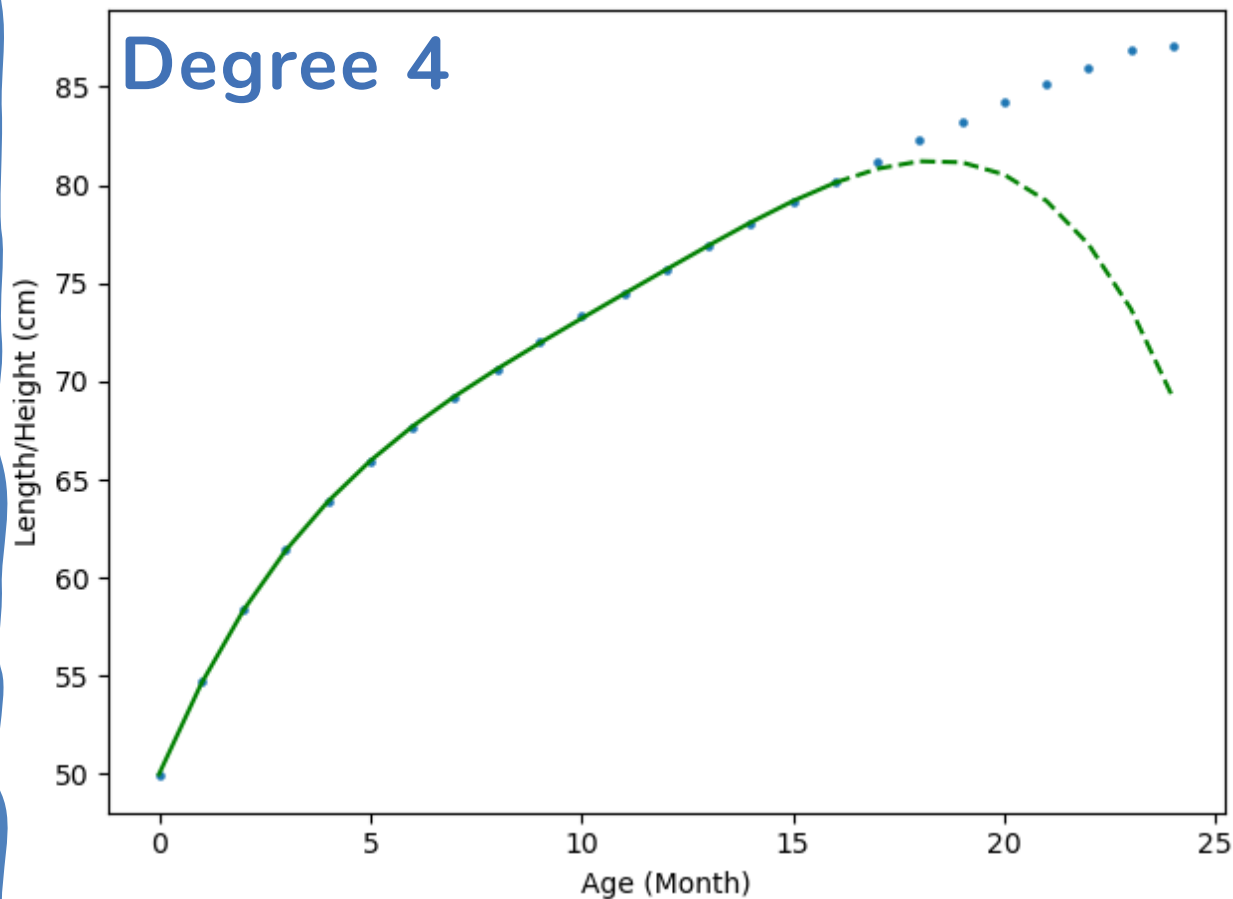
Degree 2



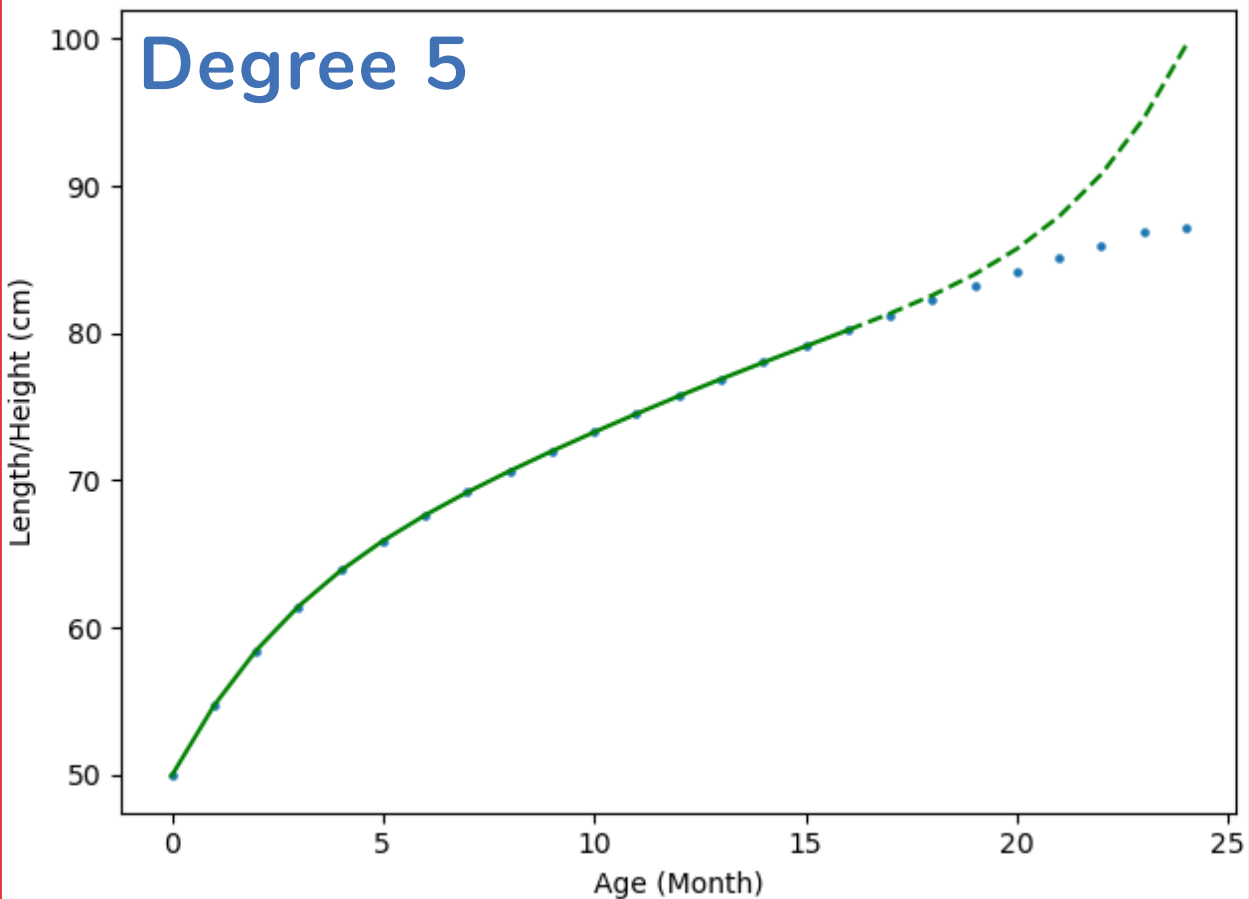
Degree 3



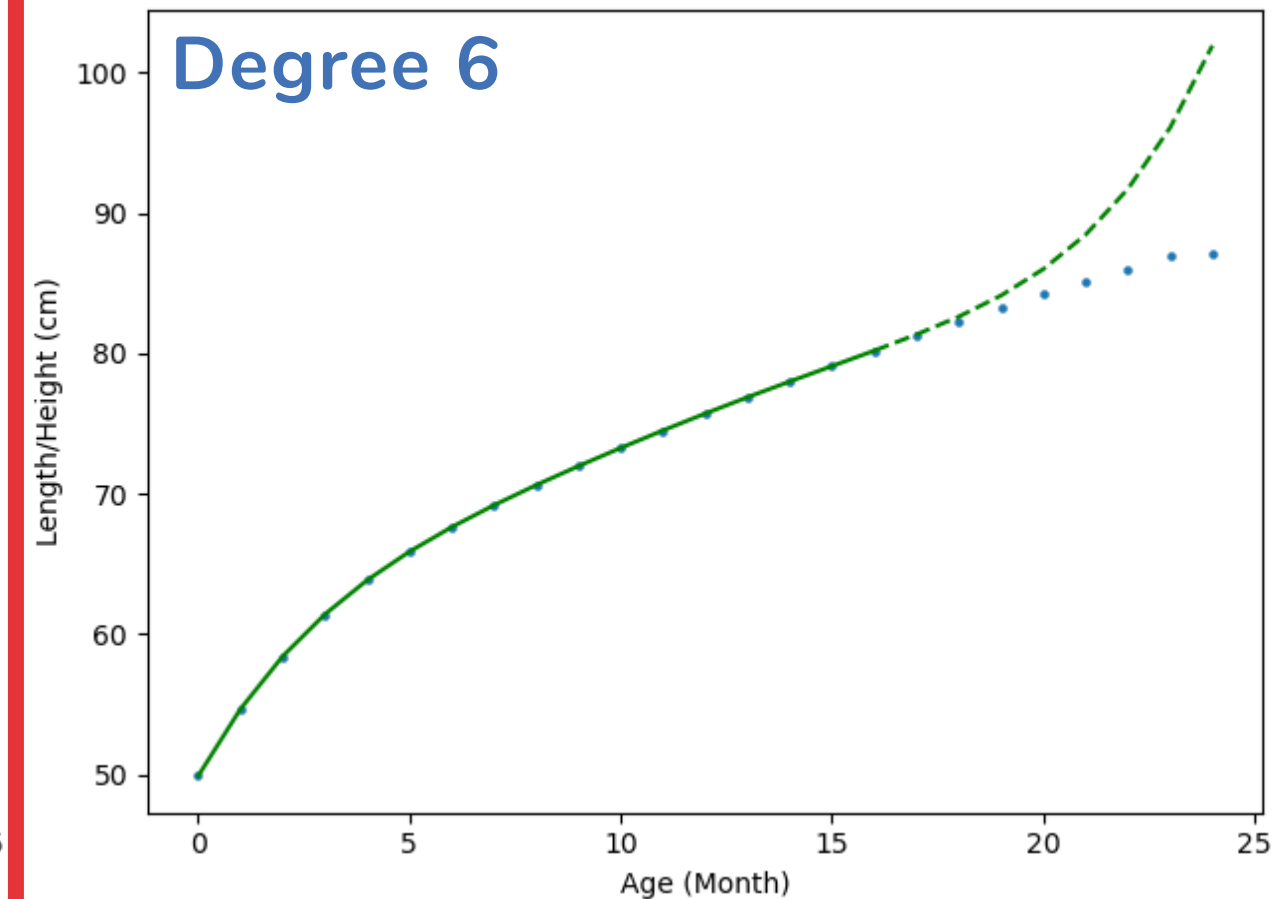
Degree 4



Degree 5



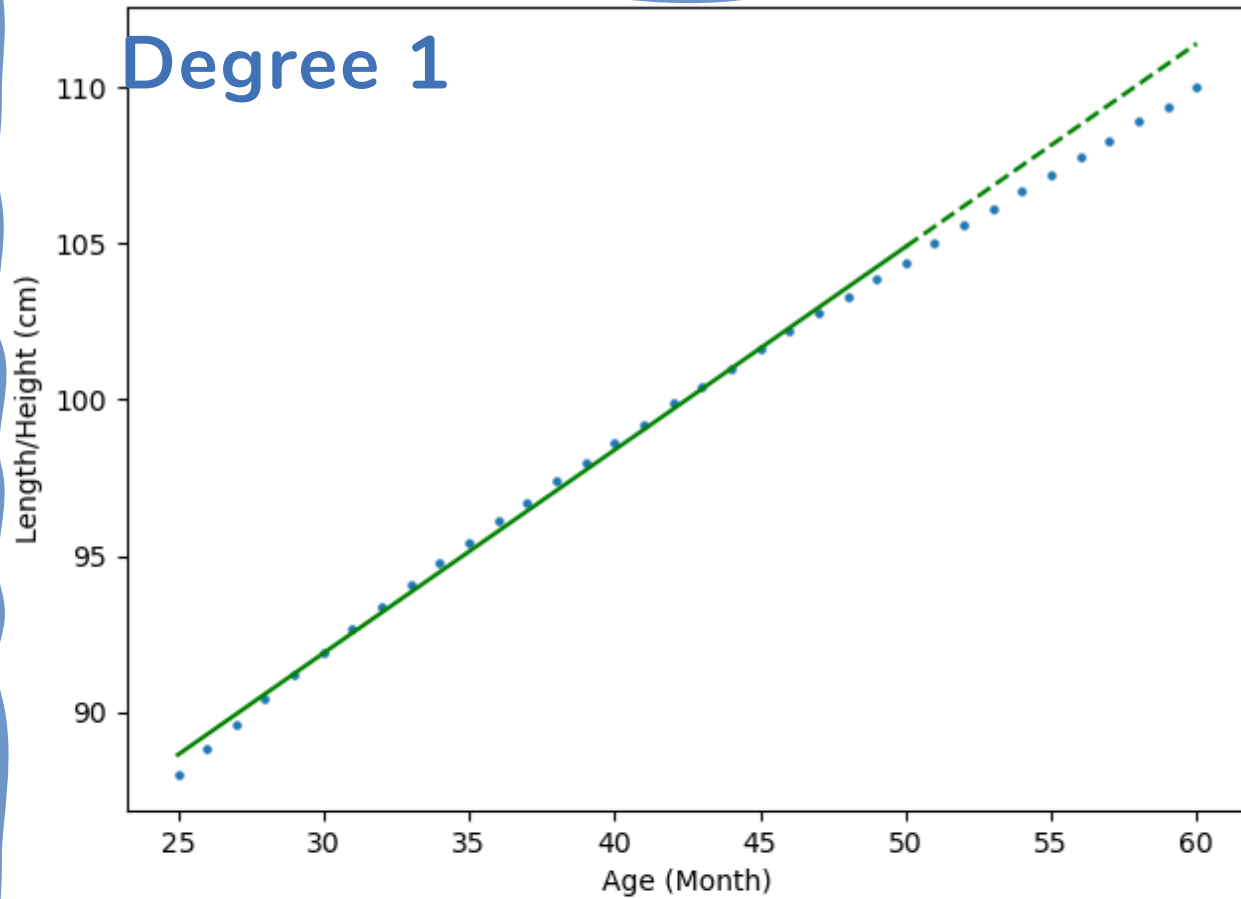
Degree 6



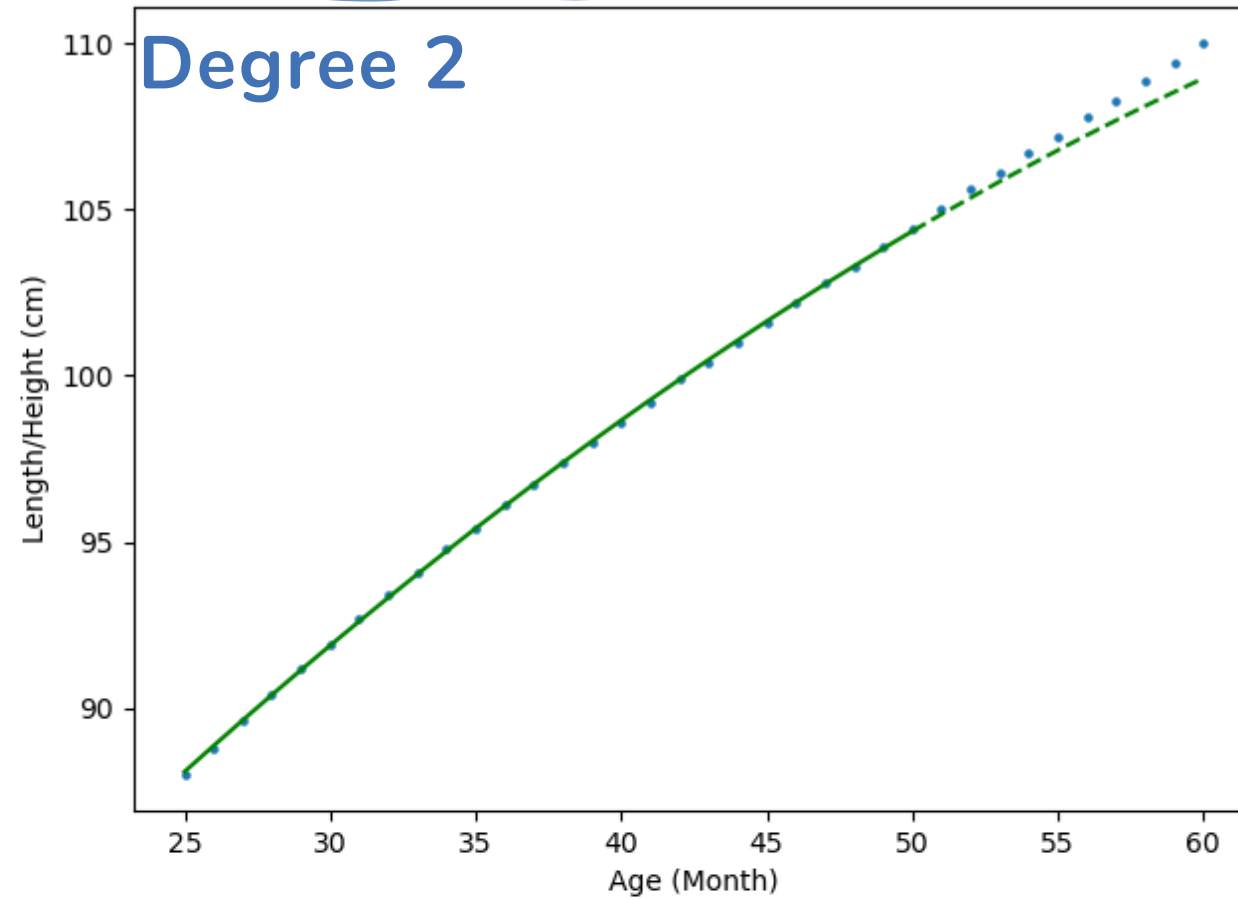
# 2 to 5 YEARS



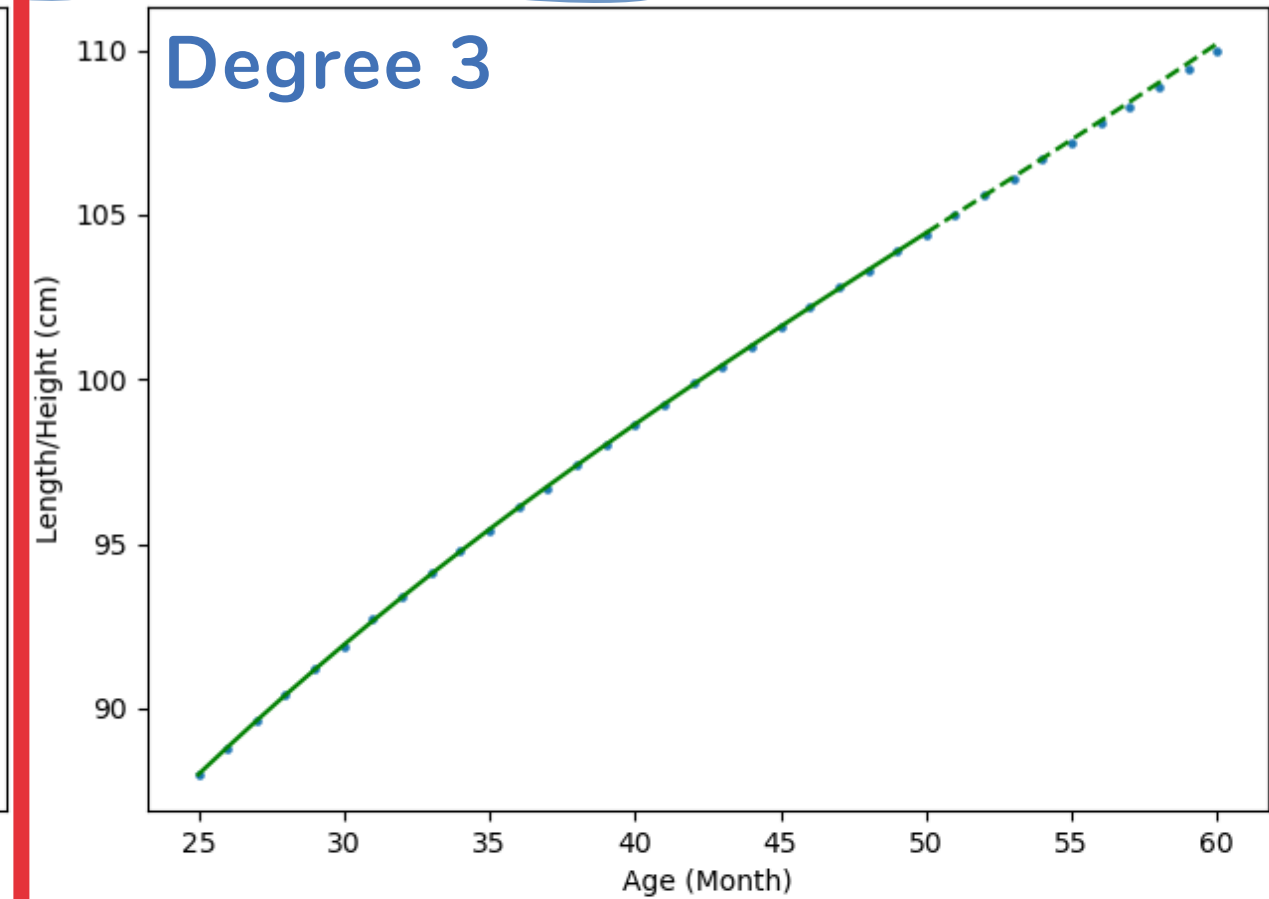
Degree 1



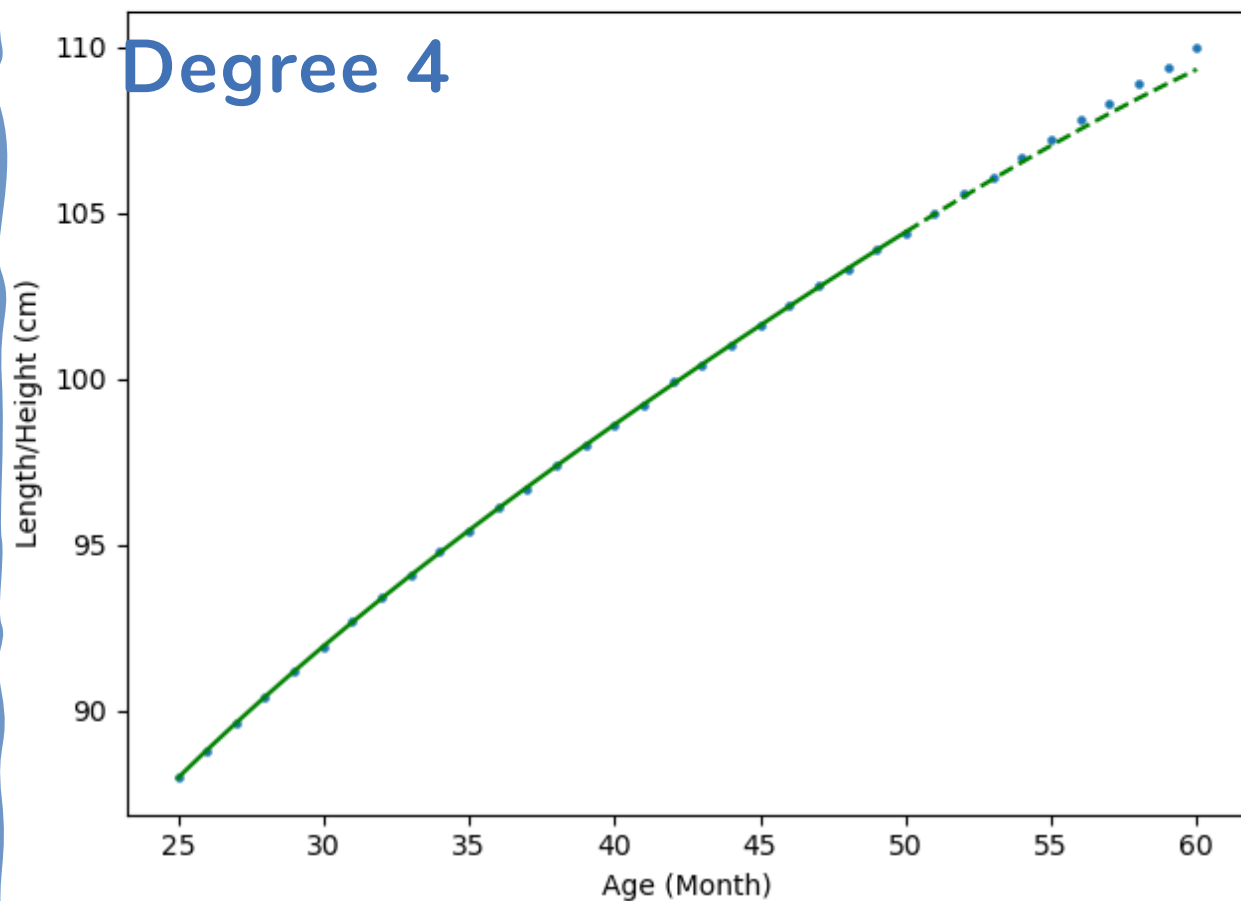
Degree 2



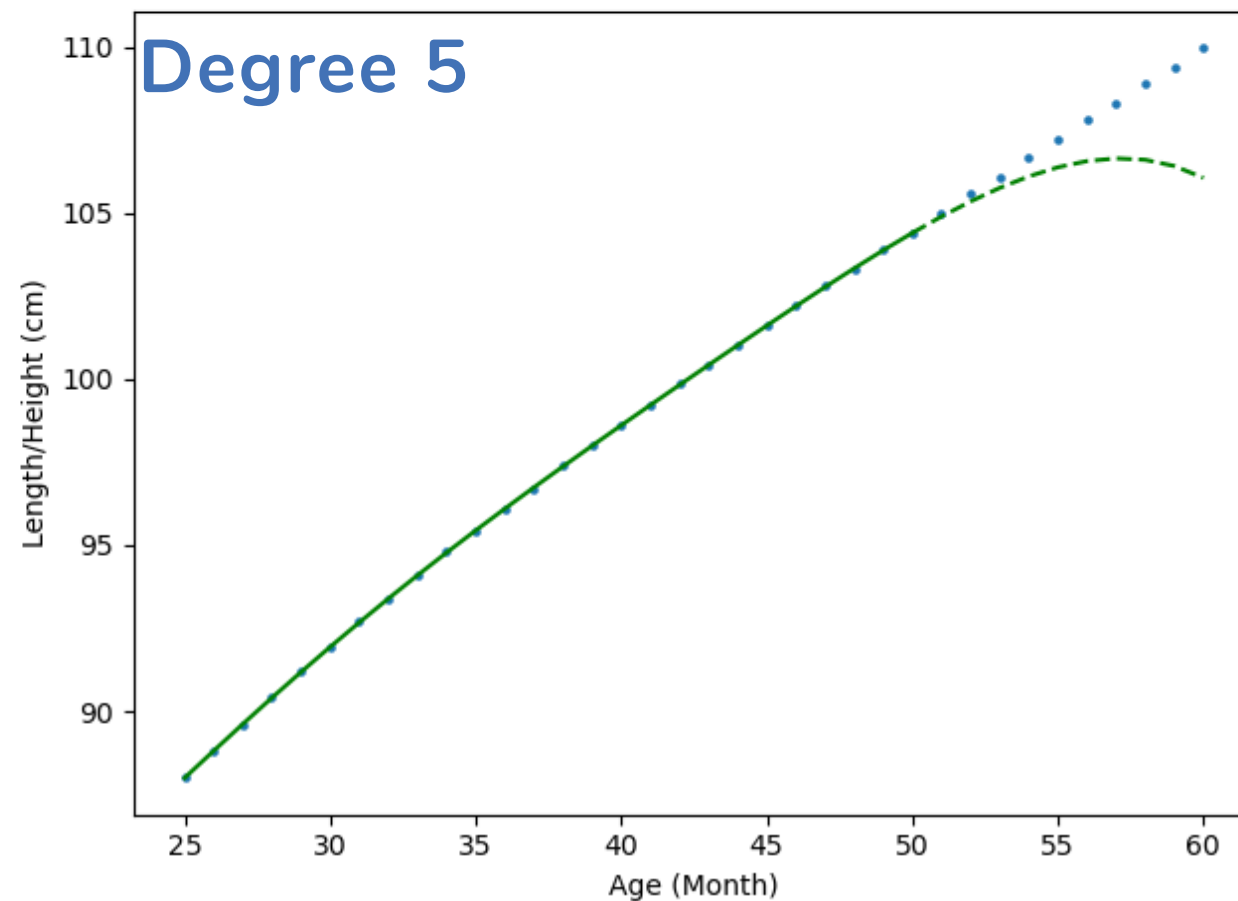
Degree 3



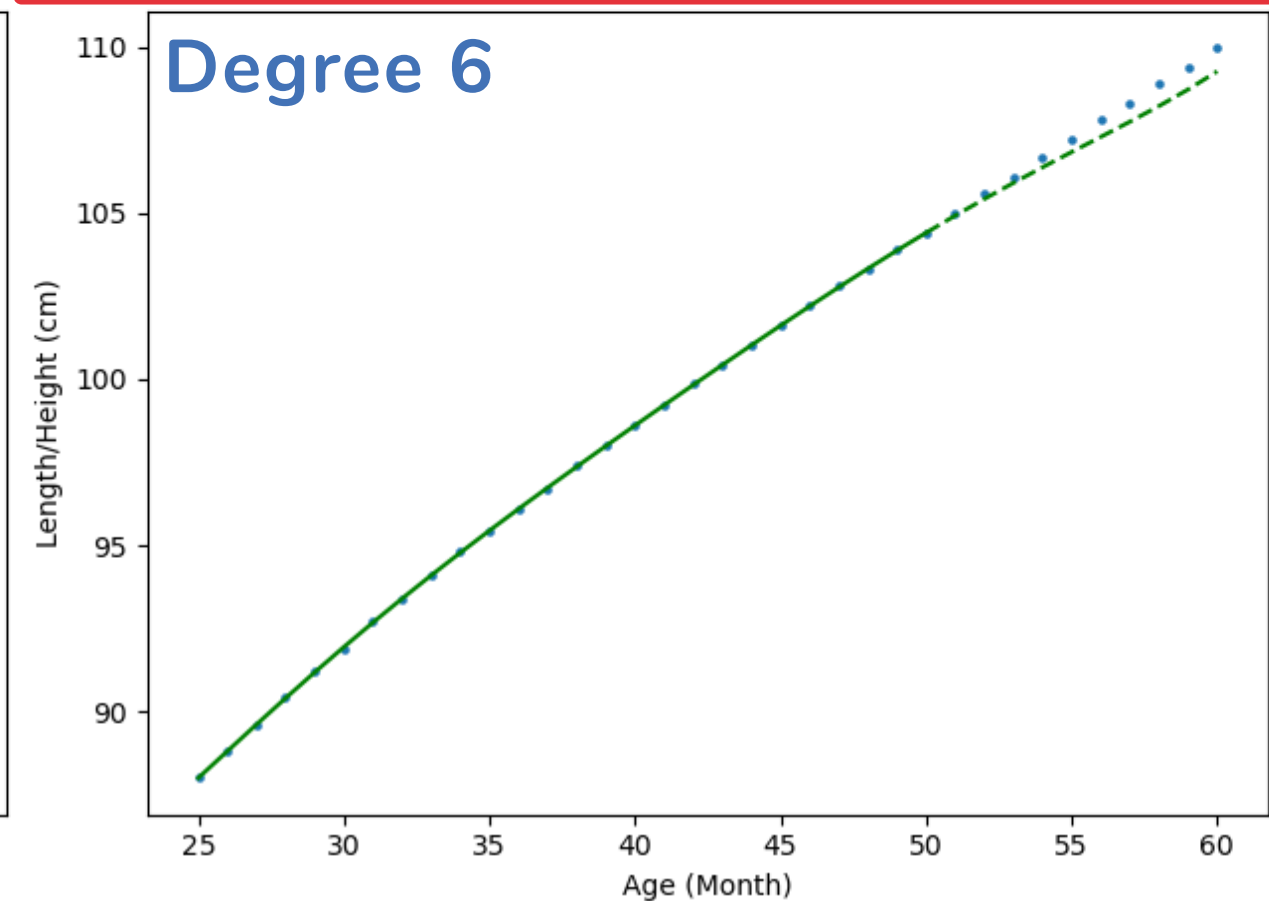
Degree 4



Degree 5

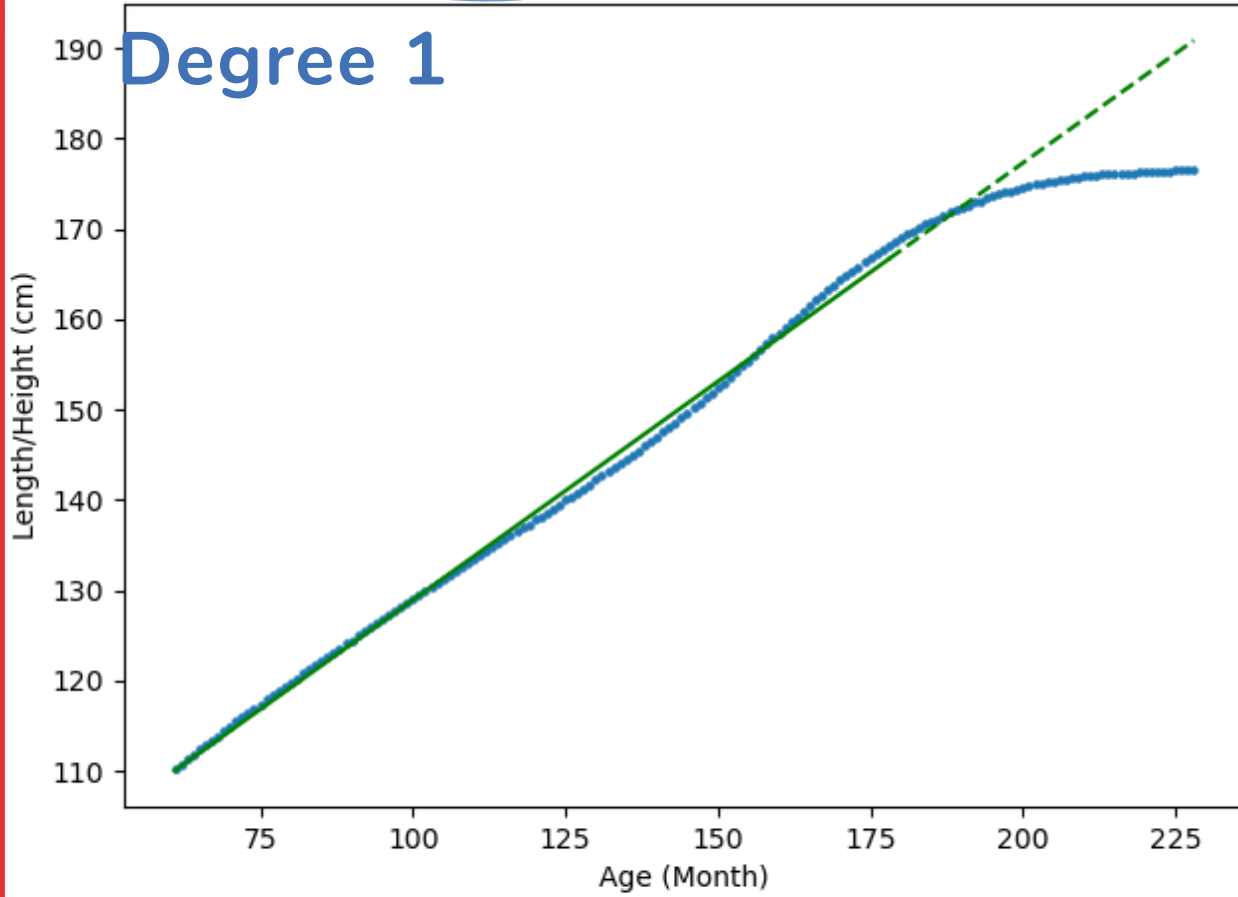


Degree 6

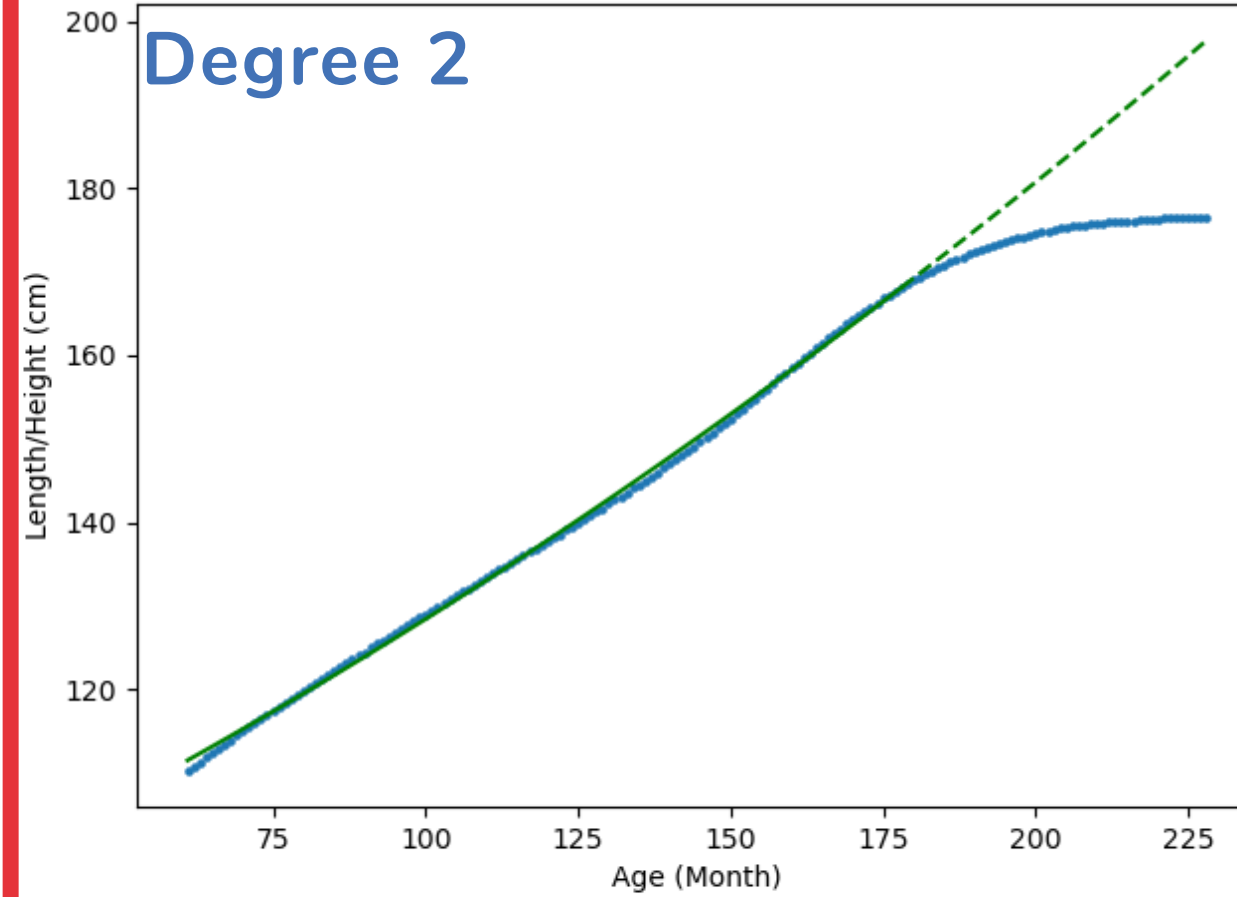


# 5 to 19 YEARS

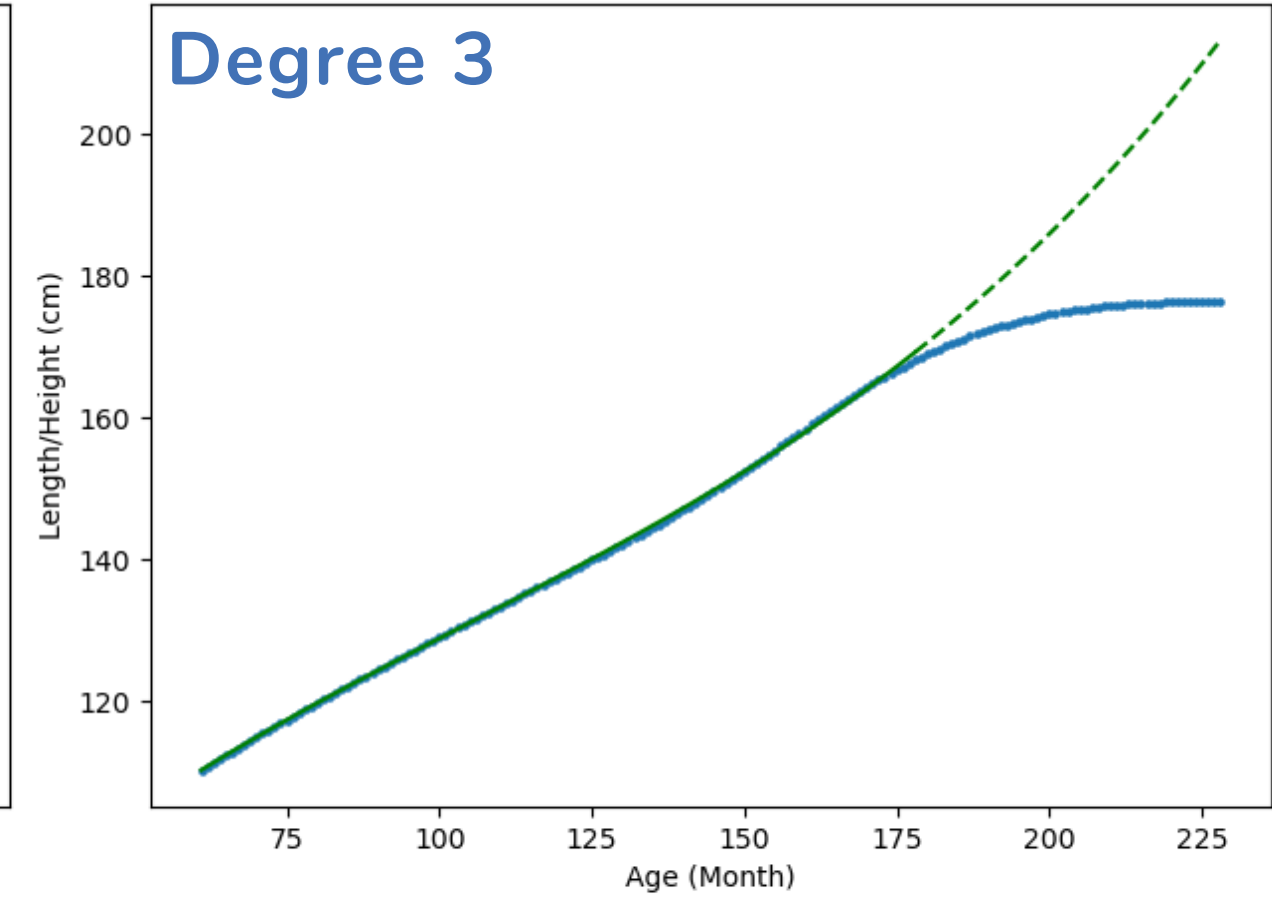
Degree 1



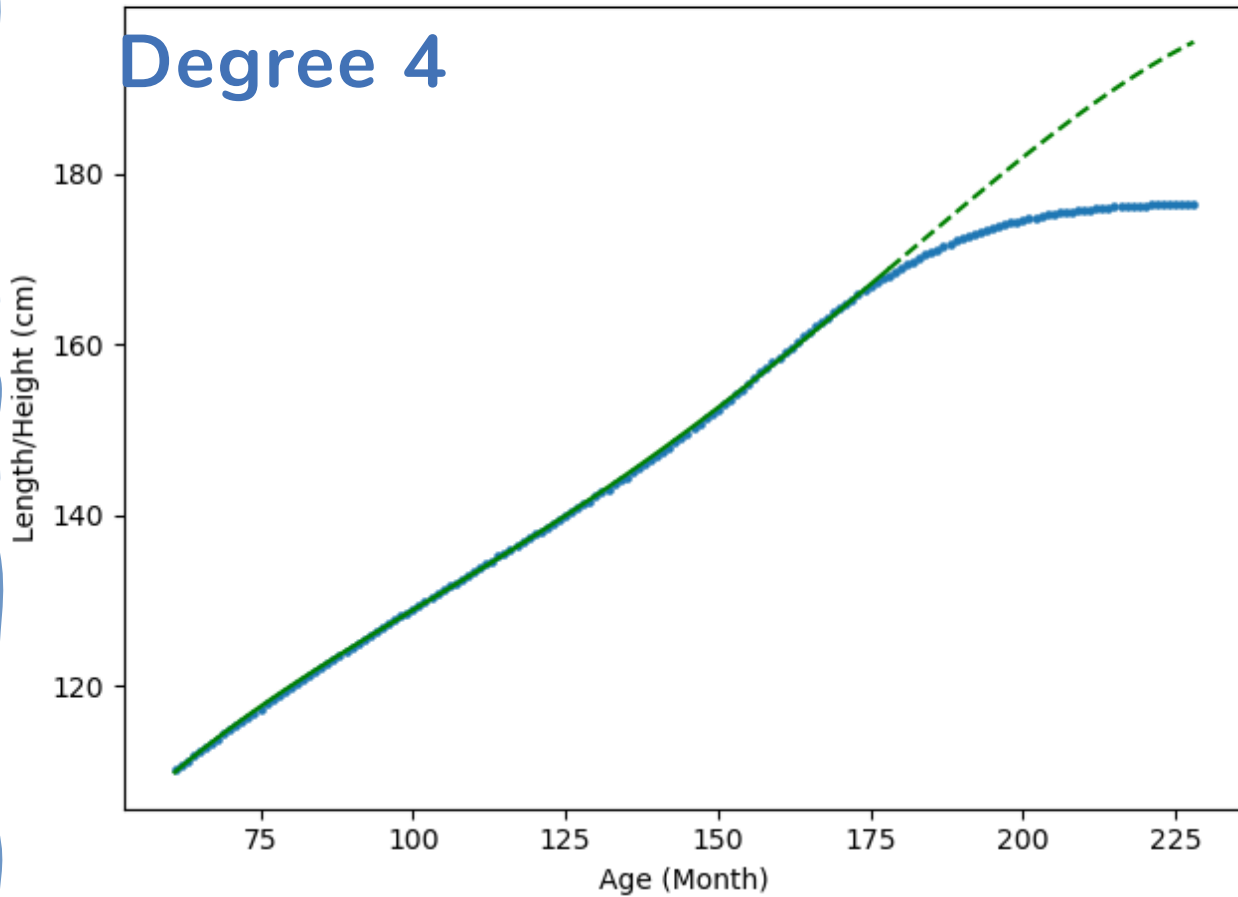
Degree 2



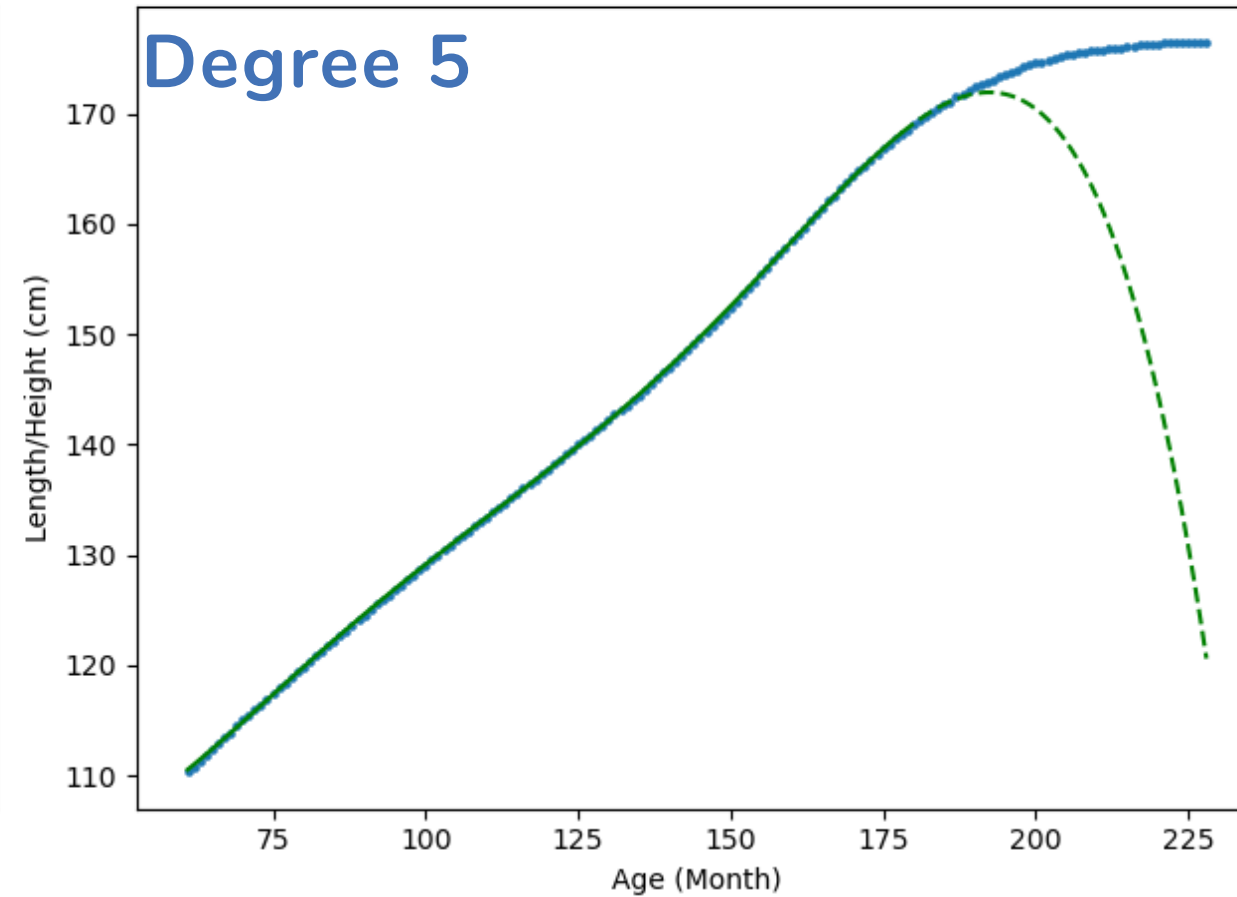
Degree 3



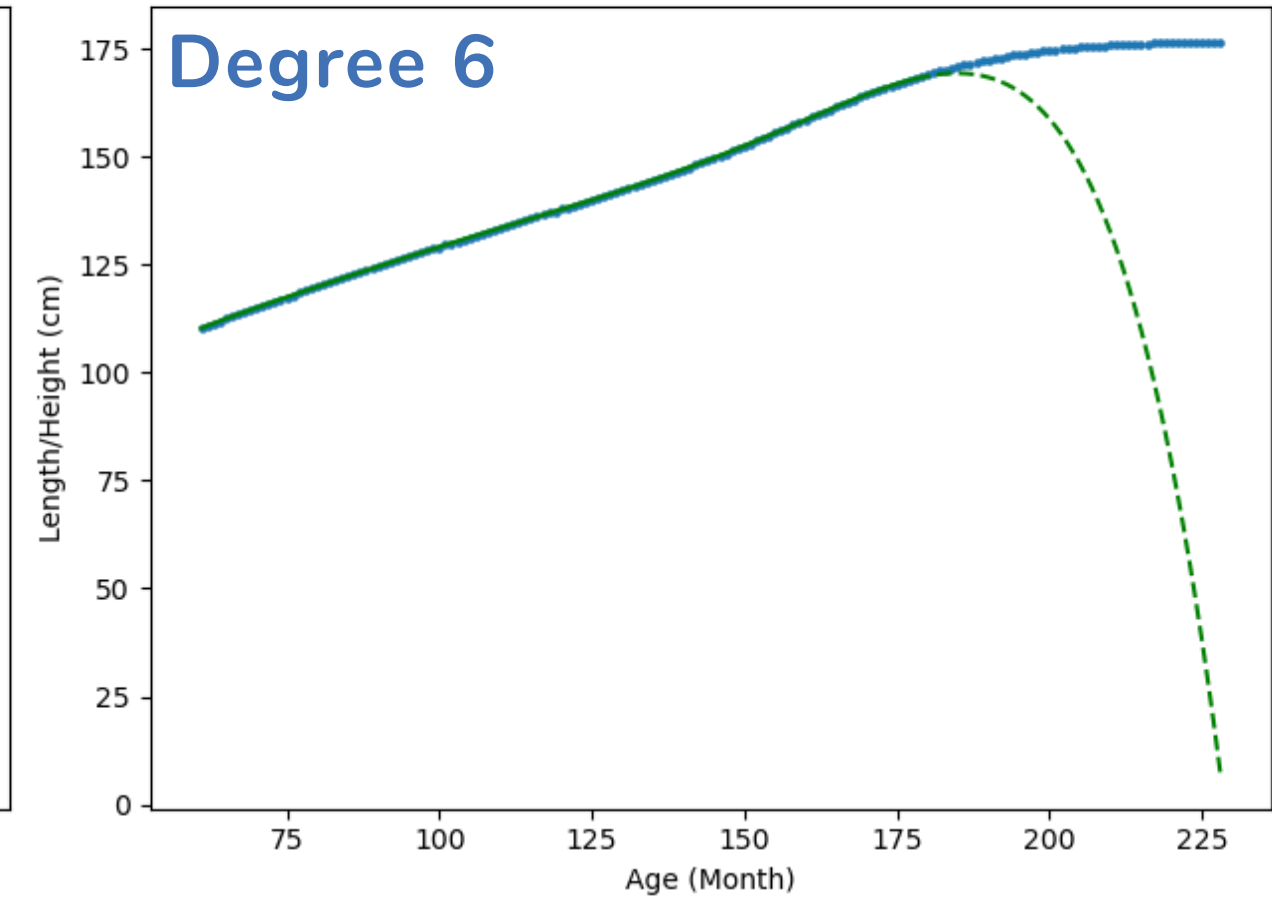
Degree 4



Degree 5



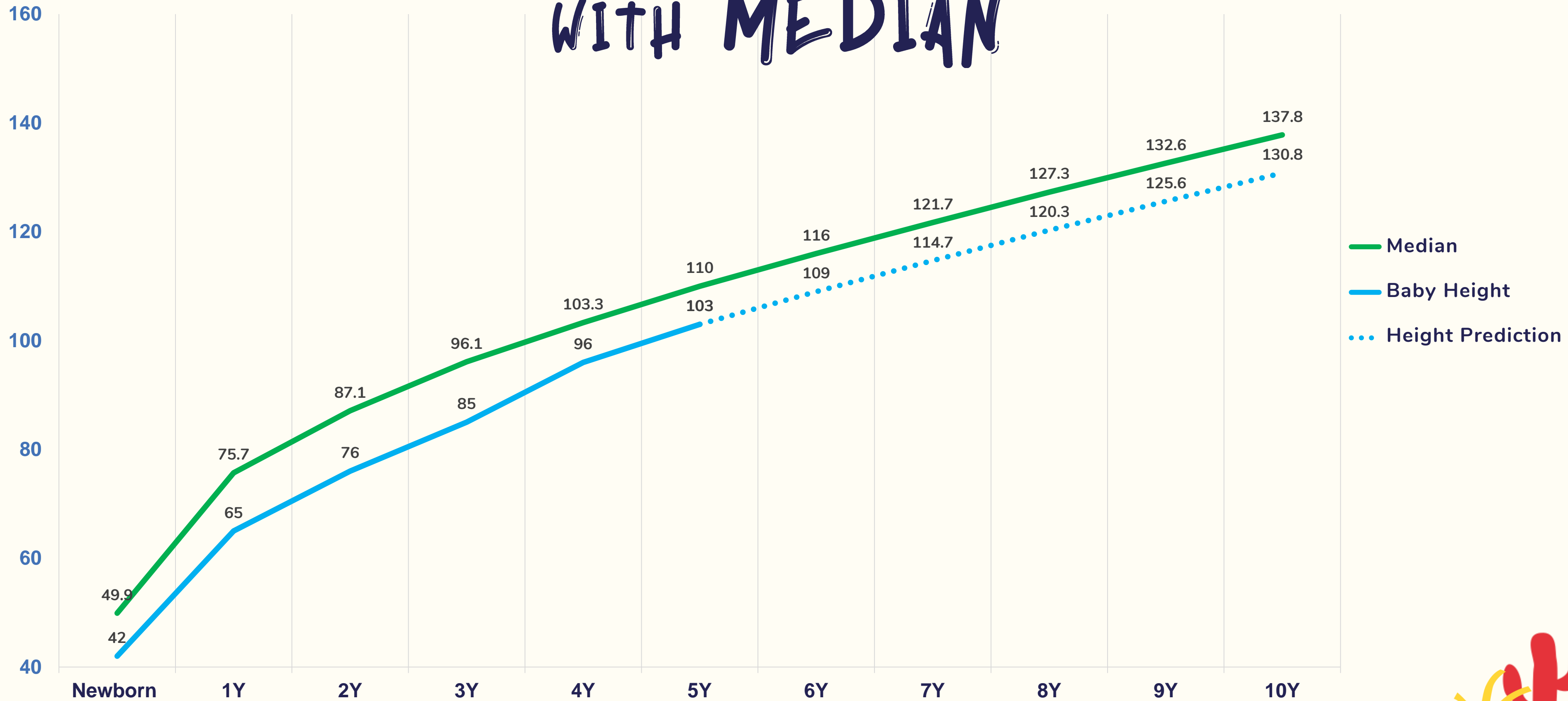
Degree 6





# HEIGHT PREDICTION FOR BOY 🌸

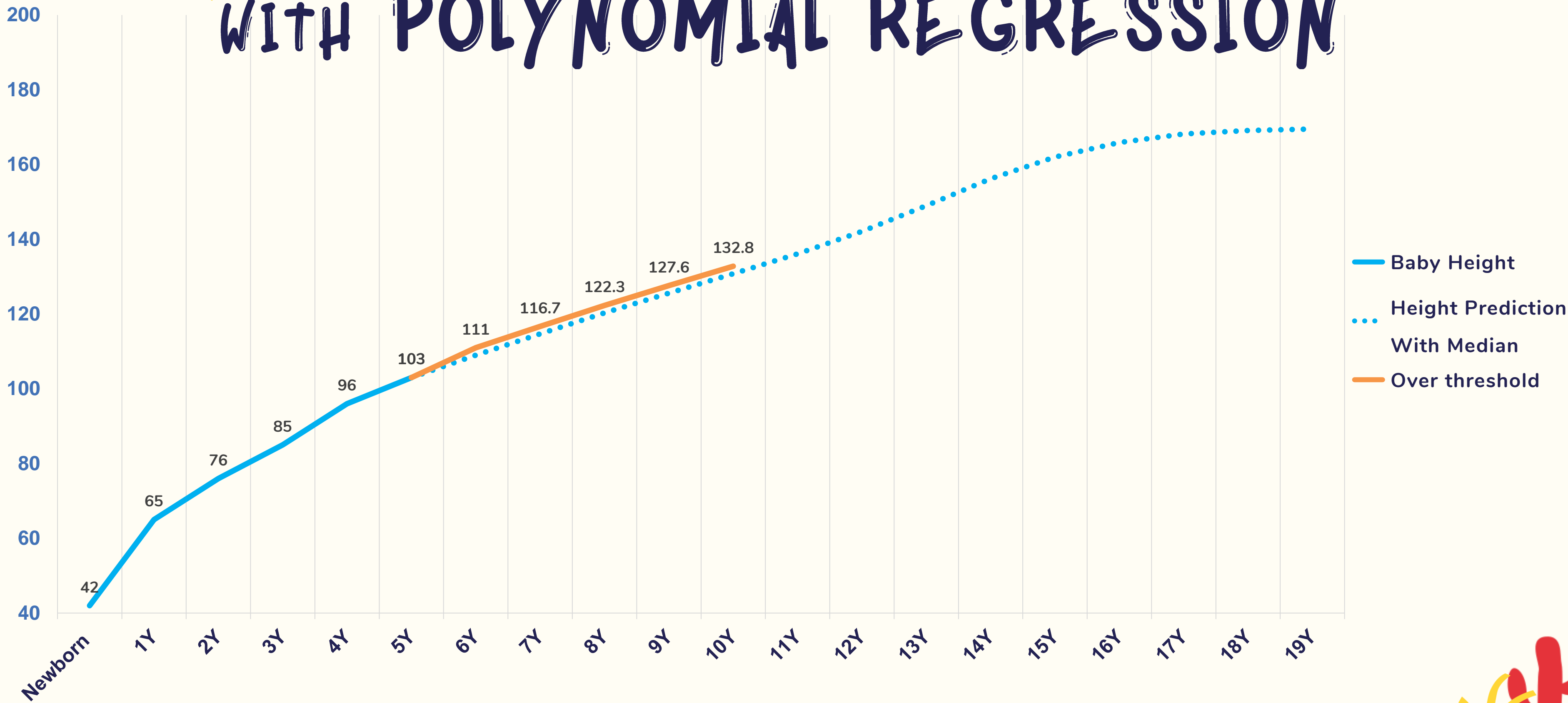
## WITH MEDIAN 🌻





# HEIGHT PREDICTION FOR BOY 🌸

## WITH POLYNOMIAL REGRESSION





# TIMELINE



Step 1:

Step 2:

Step 3:

Step 4:

Step 5:

Step 6:

Step 7:

Survey

Define scope

Research tools

Design

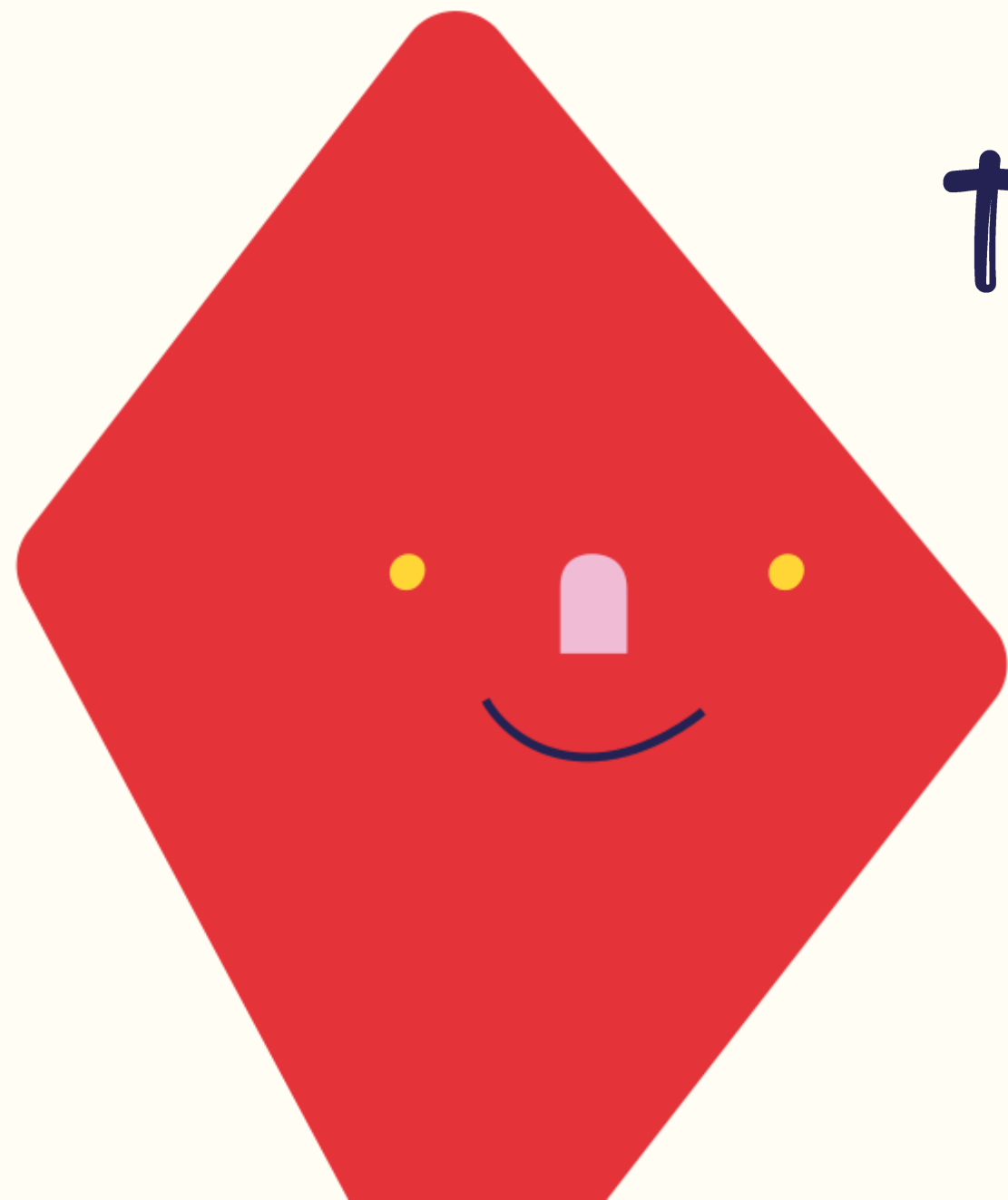
Implementation

Testing

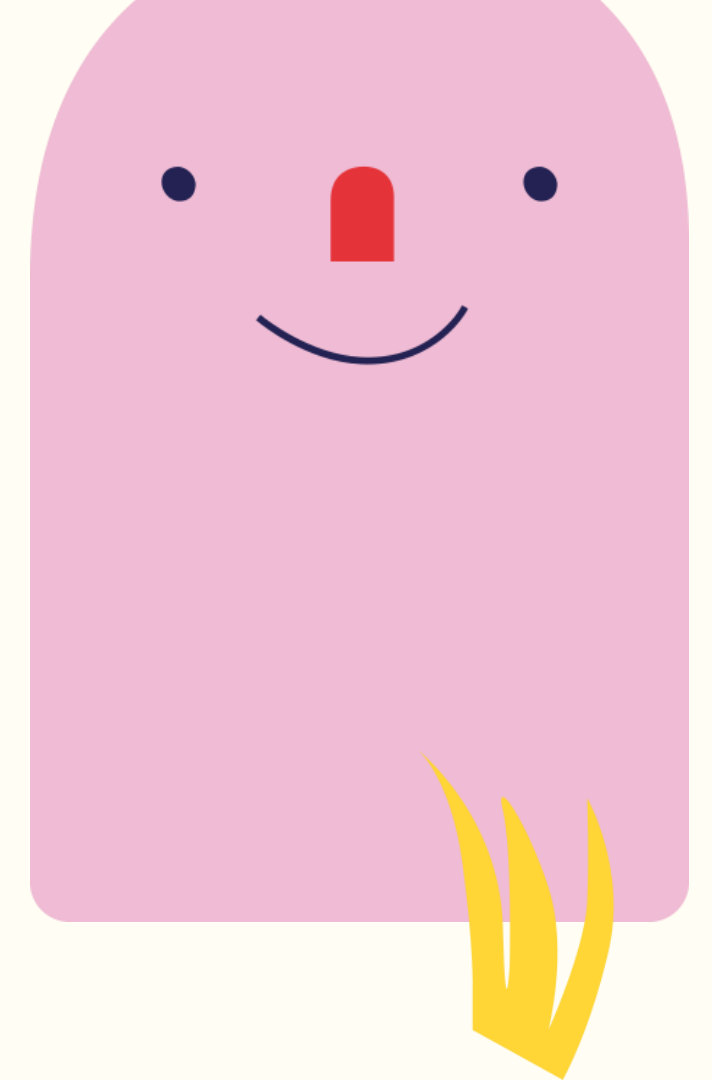
Writing report

JUL  
AUG  
SEP  
OCT  
NOV  
DEC  
JAN  
FEB  
MAR



THANK YOU



**600612161**

Pakhatai Kantang

**600612165**

Ratthathammanoon Niwanti