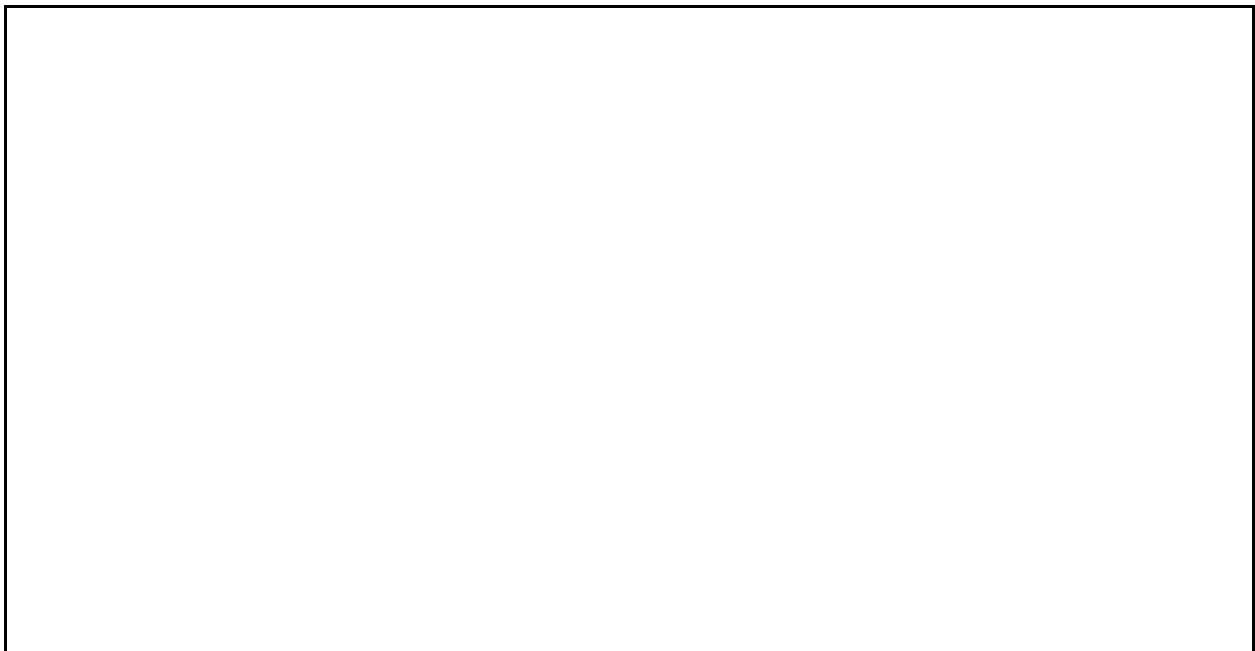


## Personal Polynomials & Function Questions/Looking Ahead

1. Create your own personal polynomial by going to <https://www.globalmathproject.org/personal-polynomial/> and entering your name. Take a screenshot of your personal polynomial and embed below.



2. Obtain the formula for your personal polynomial,  $P(x)$ , and plot it in Desmos (<https://www.desmos.com/calculato>) as it is easier to view as a whole here.



3. Once you have your Desmos graph completed, complete the table below:

Interval(s) where $P(x)$ is increasing	
Interval(s) where $P(x)$ is decreasing	
Identify all of the roots (zeros/x-intercepts) of $P(x)$	
Domain and range of $P(x)$	
Relative maxima and minima	
Absolute maximum and minimum (if they exist)	
All points where the slope is zero--identify the points where the graph comes to a "peak" or "valley"	
End behavior as $x \rightarrow \infty$ and end behavior as $x \rightarrow -\infty$	
Is the graph continuous on its entire domain? What about your classmates' graphs?	
What are the x-values called in the points where the slope of the function is zero?	