Summary Statement	Graph Investigation Question
The graph looks like a flat "S" shape	What is the shape of the graph? What does the graph look like?
The domain (x-values) is [0, infinity), the range (y-values) is...	What is the domain (x-values)? What is the range (y-values)?
Are there any limitations on the inputs (domain) of the equation?	Only positive values of x are possible because we do not take the square root of a negative number at this time.
Are there any limitations on the outputs (range) of the equation? (Is there a maximum or minimum y-value?)	The smallest y-value is 0. There is no max y-value.
The line of symmetry is at x=2 (a vertical line).	Does the graph have a line of symmetry?
The vertex is at (0, 3)	Is there a vertex?
	Are there any special points?
	What is the starting point?
There is no x-intercept. The x-intercept is...(-3, 0) The y-intercept is...(0, 6)	Are there any x- or y-intercepts?
The parabola opens up.	What is the orientation of the graph? Is it positively or negatively oriented?
The maximum is at (0,5) there is no minimum.	What is the highest (maximum) or lowest (minimum) point?
This starting point of this graph is shifted two spaces horizontally to the left...	How is this function different than the parent function?

As x increases (from left to right), the y-values decrease until 0, then increase again.	How is the graph increasing or decreasing? As x increases/decreases (from left to right), what happens to y?
I can see the y-values increase by 1 each time.	Are there any patterns in the table? Is the graph growing by a constant rate?
Yes. Each input has one and only one output.	Is the relation or graph a function?

REFLECT

Answer the essential question: How can I describe a graph?

Think about how you can use the list of summary statements and graph investigation questions to improve your understanding of all functions. A few types of functions we have investigated are linear, quadratic (parabolas) and square root functions. We will be looking at absolute value functions and cube root functions.