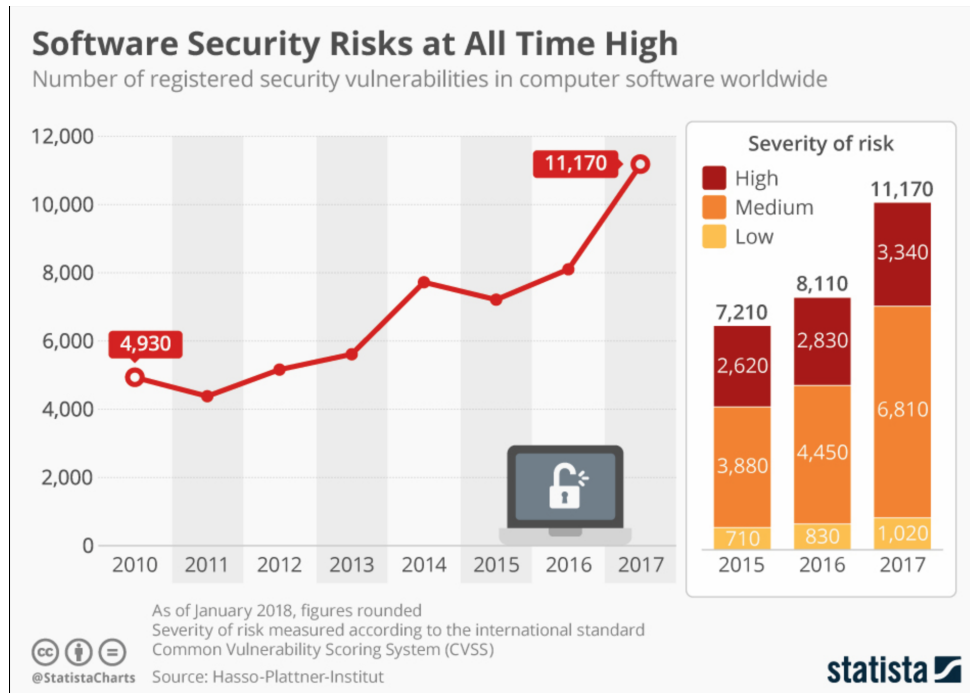# Function Notation: Software Security Risks

The graph below shows the rise in registered security vulnerabilities in computer software over the last 8 years. Source: https://www.statista.com/chart/12805/software-security-risks-at-all-time-high/

Let t = the number of years since 2010.
Let $N(t)$ = the number of registered security vulnerabilities in computer software worldwide

1. Estimate $N(3)$ and describe its meaning in words.

2. Find the t values where $N(t) > 6000$ and describe the meaning in words.

3. Describe the meaning of $N(t) = 8,110$ in words.

4. Does the graph of $N(t)$ represent a function? Why or why not?

5. There were 7,210 registered security vulnerabilities in computer software worldwide in 2015. Write a mathematical statement for this sentence using function notation.