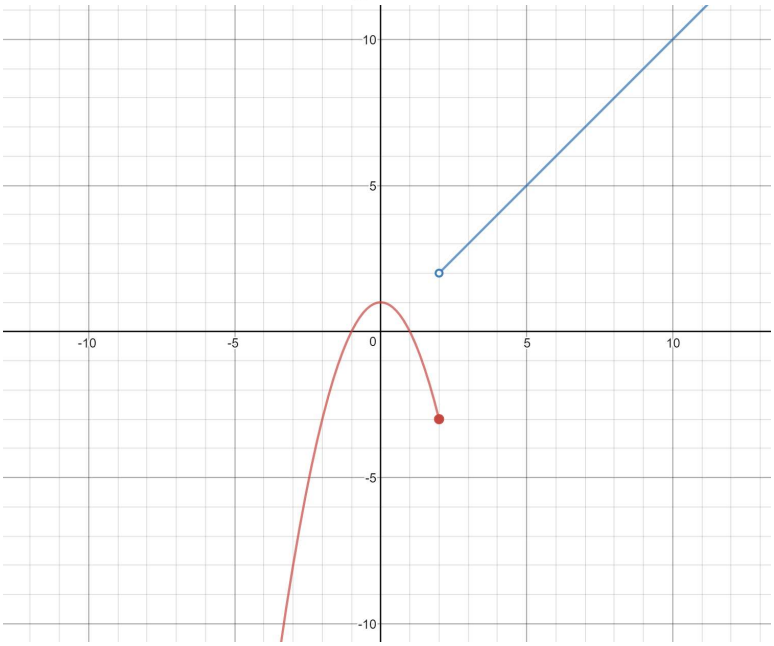
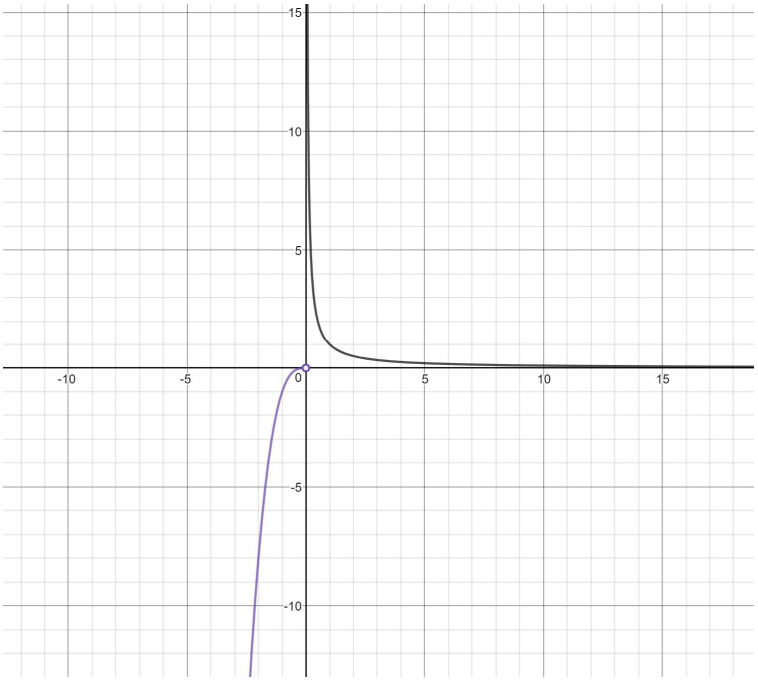
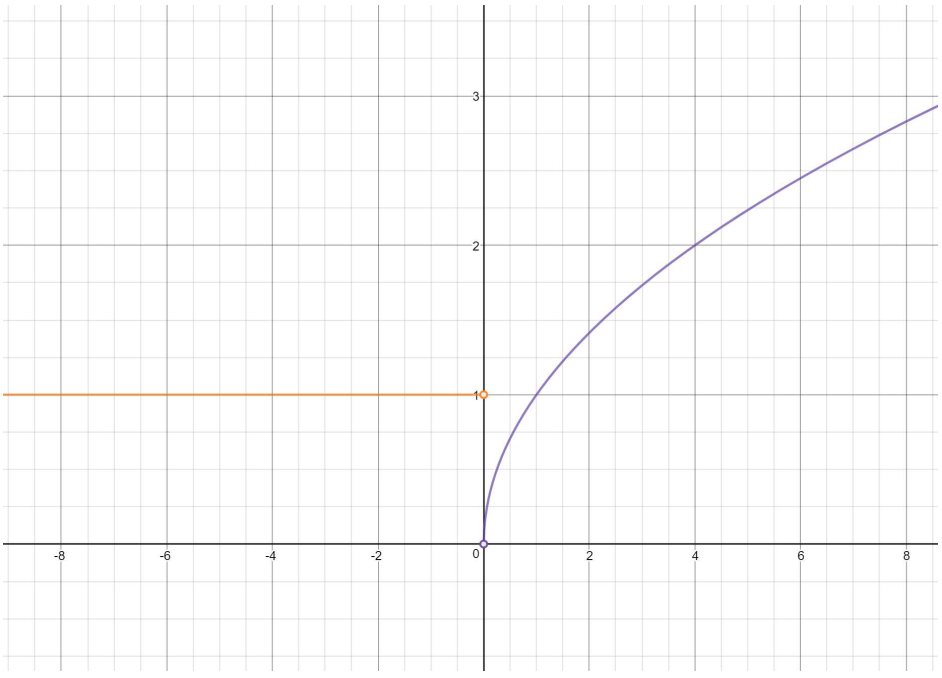
1. $f(x) = \begin{cases} 1 - x^2 & if\ x \leq 2 \\ x & if\ x > 2 \end{cases}$



2. $f(x) = \begin{cases} x^3 & if\ x < 0 \\ \frac{1}{x} & if\ x > 0 \end{cases}$



3. $f(x) = \begin{cases} -x + 4 & if\ x \leq -5 \\ x^2 & if\ -5 < x < 1 \\ \sqrt{x} & if\ x \geq 1 \end{cases}$

4. $f(x) = \begin{cases} 1 & if\ x < 0 \\ \sqrt{x} & if\ x > 0 \end{cases}$