1- Domain is $(-\infty, -1) \cup (-1, 7) \cup (7, \infty)$.

2- The vertical asymptote is $x = -3$.

3- $y = 0$ is the horizontal asymptote.

4- $f(x) = \frac{2x^2}{x^2+1}$ or $f(x) = \frac{4x^6}{2x^6+3}$ satisfies all the qualifications. Note that we can have more than one function.

5- The x-intercept is $(-1, 0)$.

6- The y-intercept is $(0, \frac{1}{2})$.