

Business PreCalculus MATH 1643 Section 004, Spring 2014
Answer key: Worksheet 21

- 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 $(0, \frac{1}{2})$.