MA16010 - Quiz 11 - Spring 2018

Directions: Please show all your work leading to your answers. Having some correct work with an incorrect answer will earn you partial credit.

Sketch the graph of a function with all of the following properties. (It may help to use the information to make a combined sign chart.)

- Asymptotes: $y = -1, x = -2, x = 2$
- $f'(x) > 0$ on $(0, 2)$ and $(2, \infty)$.
- $f'(x) < 0$ on $(-\infty, -2)$ and $(-2, 0)$.
- $f''(x) > 0$ on $(-2, 2)$.
- $f''(x) < 0$ on $(-\infty, -2)$ and $(2, \infty)$.