1) Let \( y = \frac{x + 2}{x^2} \)

(a) Determine all \( x \)- and \( y \)-intercepts.
(b) Determine equations of all vertical asymptotes and non-vertical asymptotes.
(c) Determine \( y' \) and \( y'' \).
(d) Determine intervals on which the function is increasing; determine intervals on which the function is decreasing.
(e) Determine the coordinates of all relative maximum and relative minimum points.
(f) Determine intervals on which the function is concave up; determine intervals on which the function is concave down.
(g) Determine the coordinates of all inflection points.
(h) With the aid of the information obtained in parts (a) - (g), give a reasonable sketch of the curve.