Q1. For $y = \dfrac{x^2 + x - 4}{x + 1}$;

    a- Find the intervals on which the function is concave up and down.

    b- Find the inflection points - if any.

Q2) Sketch a graph of a function that satisfies all of the following conditions;

1. f has a Horizontal asymptote @ $y = 1$
2. $f' > 0$ on $(-\infty, 1)$
   $f' < 0$ on $(1, \infty)$
3. $f'' > 0$ on $(1, \infty)$ and $(-\infty, 1)$
4. f has a Local maximum at $x = 1$.

Q1. For $y = \dfrac{x^2 + x + 4}{x + 1}$;

   a- Find x- & y- intercepts.

   b- Find the intervals on which the function is increasing and decreasing.

   c- Find the Local Extremes – if any.

Q2) Sketch a graph of a function that satisfies all of the following conditions;

1. $f' > 0$ on $(-\infty,1)$ and $(1,\infty)$
2. $f'' > 0$ on $(-\infty,1)$
   $f'' < 0$ on $(1,\infty)$
3. f has an Inflection point at $x = 1$.