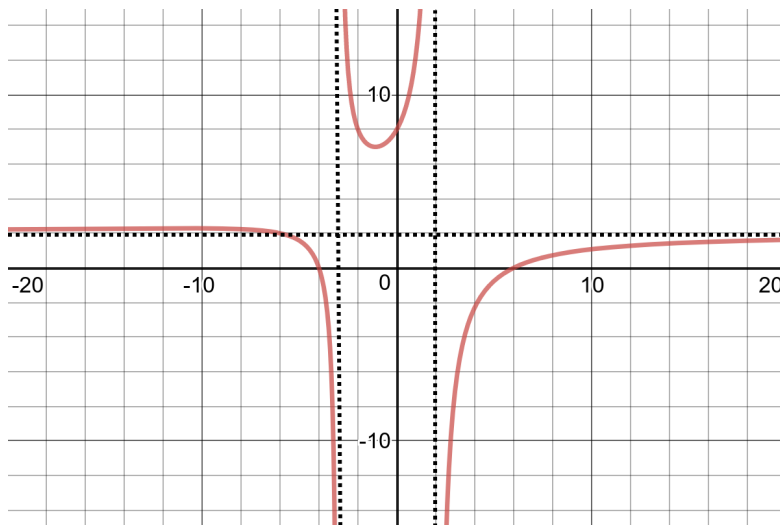Algebra II, Quiz 13.1-13.2

1. Give the zeros, holes, vertical asymptotes, long-run behavior and y-intercept of:

$$\frac{(x^2-1)(x^2-9)}{(2x-5)(x^2-x-2)}$$

(don't forget to factor!)

2. The graph above is the graph of the rational function:

$$\frac{k(x-p)(x-q)}{(x-r)(x-s)}$$

Based on the graph, find the values of k, p, q, r, and s given that $p < q$ and $r < s$.