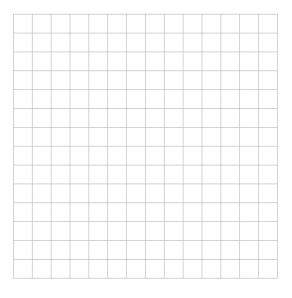
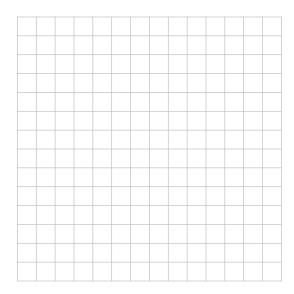
Rational functions

For each rational function, identify all holes, vertical asymptotes, zeros, and horizontal asymptotes. Then sketch the graph.

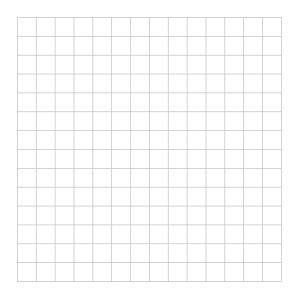
1.
$$h(x) = \frac{x-2}{x-4}$$



2.
$$f(x) = \frac{x^2 + 5x + 6}{x^2 + 3x + 2}$$



$$3. \ g(x) = \frac{3x^2}{x^2 - 9}$$



4.
$$f(x) = \frac{x^3 - 9x}{3x^2 - 6x - 9}$$

