

Math 3 Advanced  
8.2 Graph Rationals

Find all the key points of the given rational function.

1.  $f(x) = \frac{2x^2 + 5x - 12}{x^2 + 2x - 8}$

2.  $g(x) = \frac{5x^2 + 29x - 6}{x^2 + 5x - 6}$

3.  $h(x) = \frac{3x^2 - 17x + 10}{6x^2 - 7x + 2}$

4.  $r(x) = \frac{2x^2 - 3x + 1}{3x^2 - 2x - 1}$

5.  $g(x) = \frac{6 - 7x + 2x^2}{3x^2 - 5x + 2}$

6.  $h(x) = \frac{3x^2 - x - 4}{5x^2 + 21x + 4}$

7.  $h(x) = \frac{(x - 2)(x + 3)}{(x - 4)(x - 1)(x + 2)}$

8.  $p(x) = \frac{(2x - 1)(x + 1)}{(x + 5)(x - 2)(x + 3)}$

9.  $g(x) = \frac{(x - 4)(x + 2)}{(x - 3)(x + 3)(x + 5)}$

10.  $r(x) = \frac{(2x + 3)(x - 4)}{x(x + 4)(x - 3)}$

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

12.  $h(x) = \frac{2x^3 - 2x^2}{x^2 - x - 30}$