

Rational Functions and their Graphs

For each function, find [a] the x -intercept(s), [b] y -intercept, [c] vertical asymptote(s), and [d] horizontal asymptote. Make a sketch of the function.

[1] $f(x) = \frac{x+2}{x-1}$

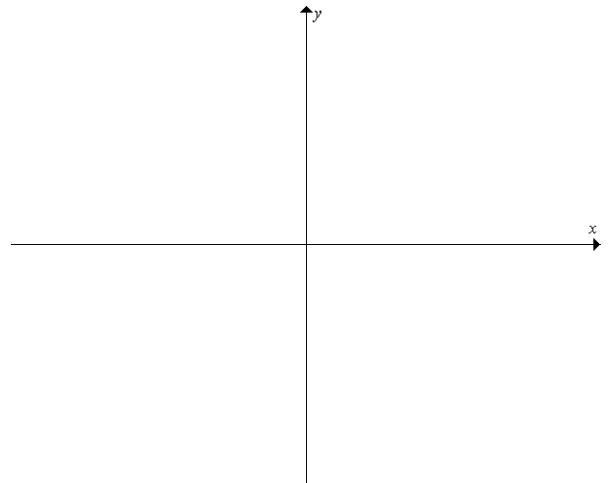
[a]

[b]

[c]

[d]

[e]



[2] $f(x) = \frac{x-3}{x+2}$

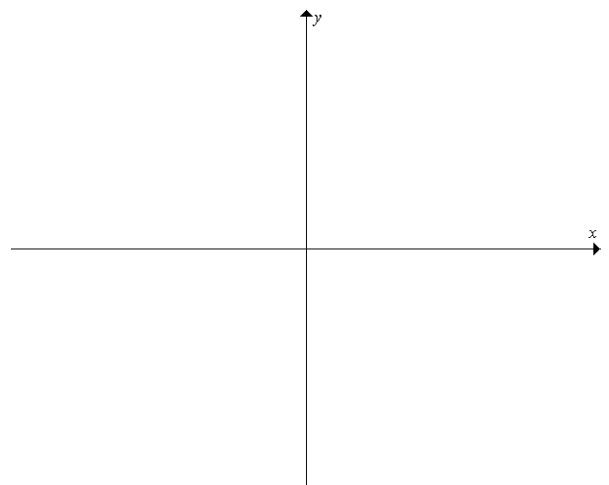
[a]

[b]

[c]

[d]

[e]



[3] $f(x) = \frac{x-1}{x^2-4}$

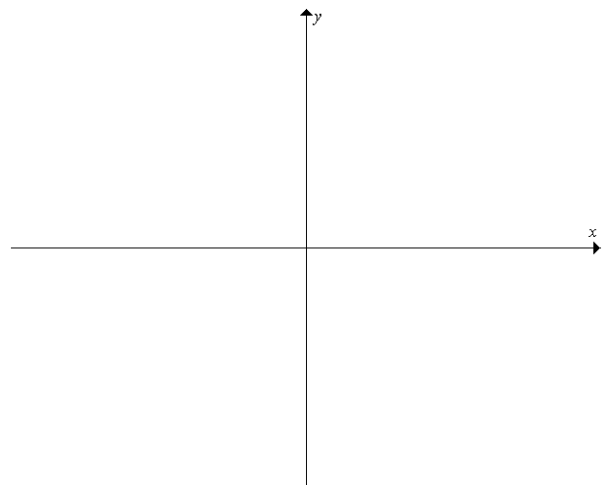
[a]

[b]

[c]

[d]

[e]



[4] $f(x) = \frac{x+2}{x^2-1}$

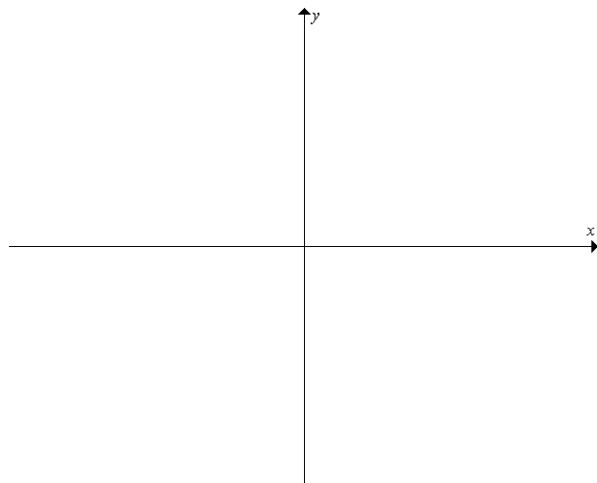
[a]

[b]

[c]

[d]

[e]



[5] $f(x) = \frac{x^2-4}{x^2-1}$

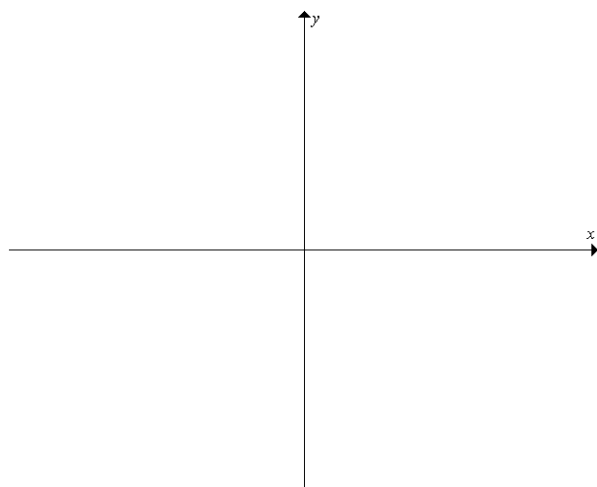
[a]

[b]

[c]

[d]

[e]



[6] $f(x) = \frac{x^2-1}{x^2-4}$

[a]

[b]

[c]

[d]

[e]

