11-2 Graphing Transformation Form

I can graph the transformation form of a rational expression.

Using synthetic division to rewrite a rational expression

$$g(x)=\frac{3x-4}{x-1}$$

1 | 3 −4

↓ 3

3 | −1 R

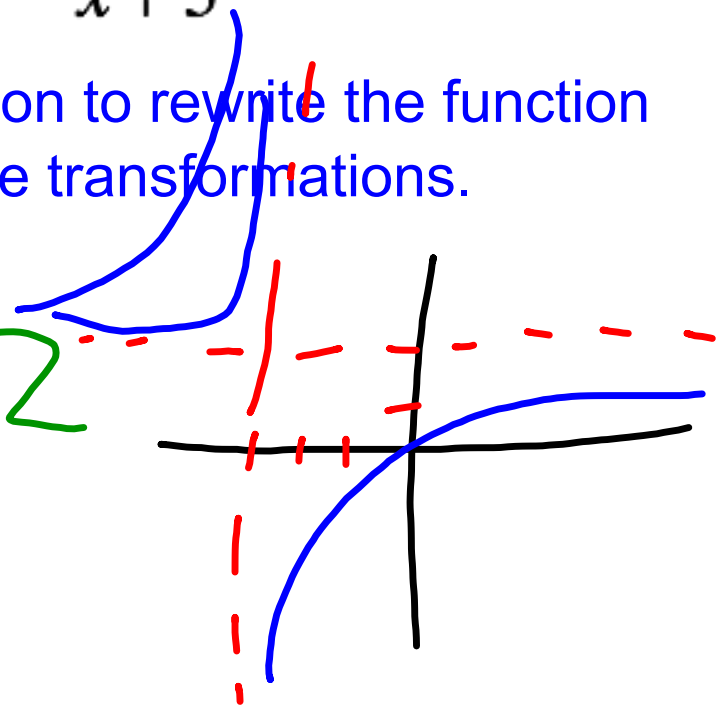
$$3+\frac{-1}{x-1}$$

$$-\frac{1}{x-1}+3$$

$$f(x)=\frac{2x-1}{x+3}$$

Use synthetic division to rewrite the function and then identify the transformations.

$$-\frac{7}{x+3}+2$$



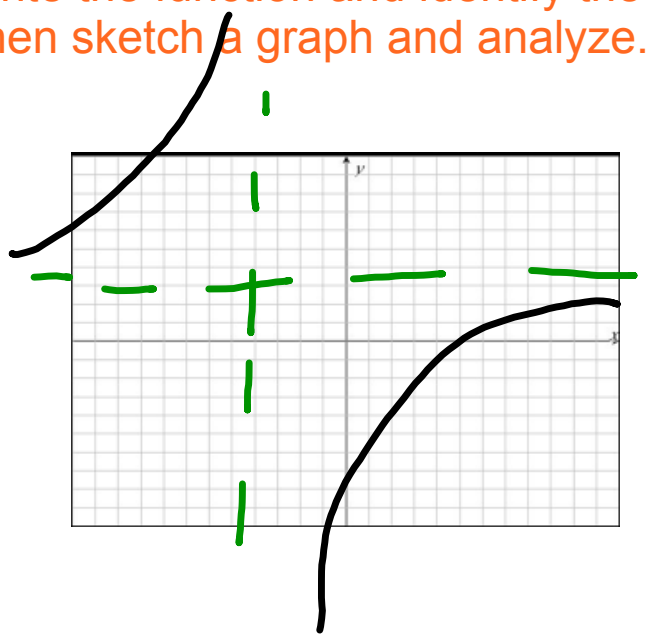
$$f(x)=\frac{4x+7}{x+4}$$

Use division to re-write the function and identify the transformations. Then sketch a graph and analyze.

$4 + \frac{-a}{x+4}$

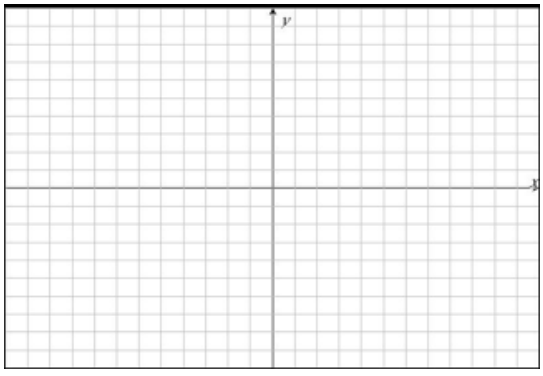
V Asymptote: -4

H Asymptote: 4



$$f(x)=\frac{3x+7}{x+2}$$

Use division to re-write the function and identify the transformations. Then sketch a graph and analyze.



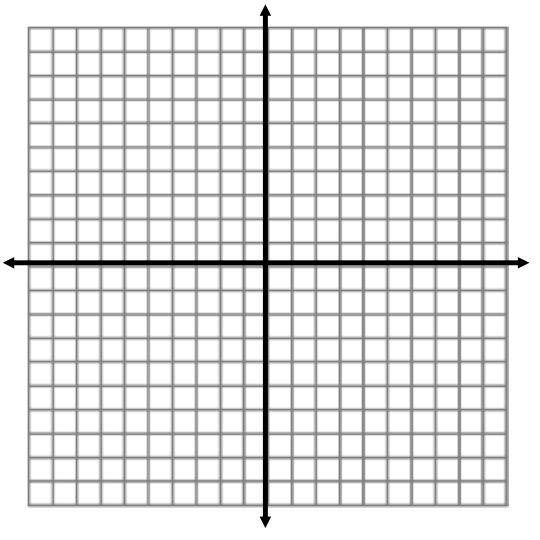
V Asymptote:

H Asymptote:

$$f(x)=\frac{5-2x}{x+4}$$

V Asymptote:

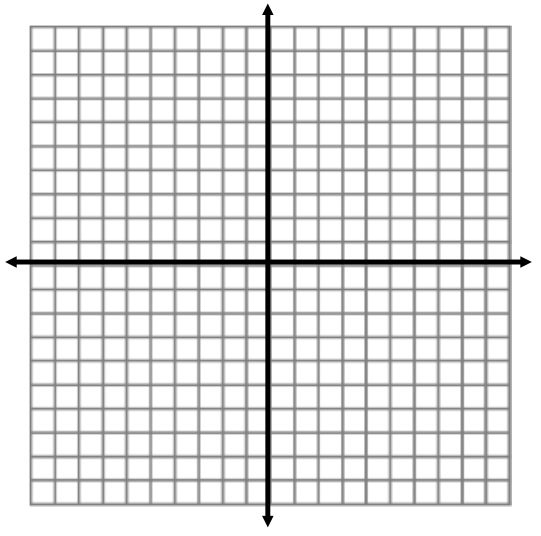
H Asymptote:



$$f(x) = \frac{4 - 3x}{x - 5}$$

V Asymptote:

H Asymptote:



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