

$$f := x \rightarrow \frac{(2 \cdot x^2 - x - 15)}{(x - 7) \cdot (x + 3)}$$

$$x \rightarrow \frac{2x^2 - x - 15}{(x - 7)(x + 3)}$$

(1)

with(plots) :

fplot := plot([f(x), 2], x=-10..10, y=-10..10, linestyle=[solid, dashdot], color=[black, red],
thickness=[2, 1], discontin=true) : %:

asymptot := implicitplot([x=-3, x=7], x=-10..10, y=-10..10, linestyle=dashdot, color=red) : %:
display([fplot, asymptot])

