

BAA08 Matematika I (G)

Průběhy funkcí

13.6 Určete průběh funkce:

(a) $f(x) = x + \frac{1}{x}$

(b) $f(x) = \frac{x^3}{3 - x^2}$

(c) $f(x) = \frac{e^x}{x + 1}$

(d) $f(x) = \frac{x^2}{e^x}$

(e) $f(x) = \frac{\ln x}{x}$

(f) $f(x) = \frac{1}{\ln x}$

(g) $f(x) = \arcsin \frac{1 - x^2}{1 + x^2}$

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

(i) $f(x) = x + 2 \operatorname{arccotg} x$

(j) $f(x) = \frac{e^x}{x^2 + 2x}$

(k) $f(x) = xe^{\frac{1}{x}}$

(l) $f(x) = \frac{x}{1 + x^2}$

(m) $f(x) = \frac{x^3}{e^x}$

(n) $f(x) = \frac{x^2 - 1}{e^x}$

(o) $f(x) = \frac{e^x}{x^3}$

(p) $f(x) = \ln \frac{x}{x + 1}$

(q) $f(x) = \ln \frac{x^2}{x + 1}$

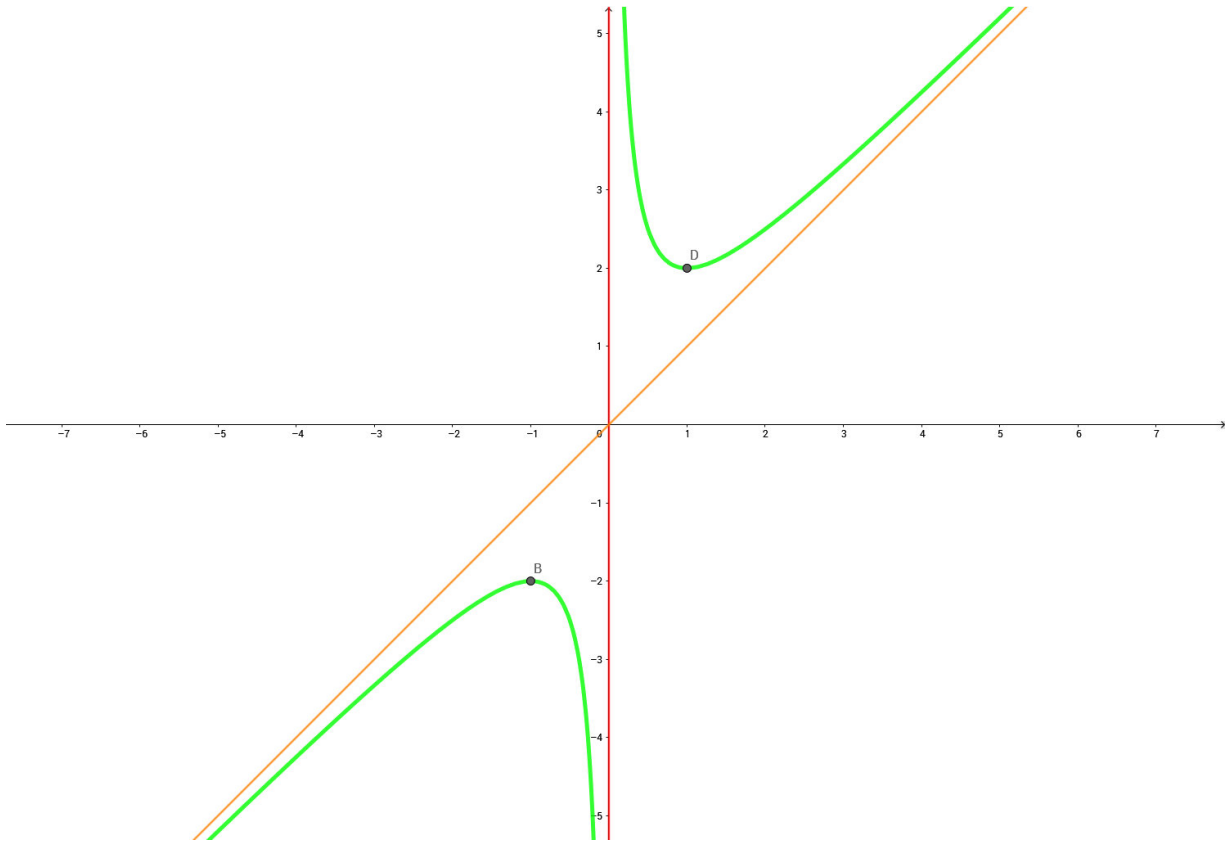
(r) $f(x) = \ln \frac{2x}{x - 1}$

(s) $f(x) = \ln(2x - x^2)$

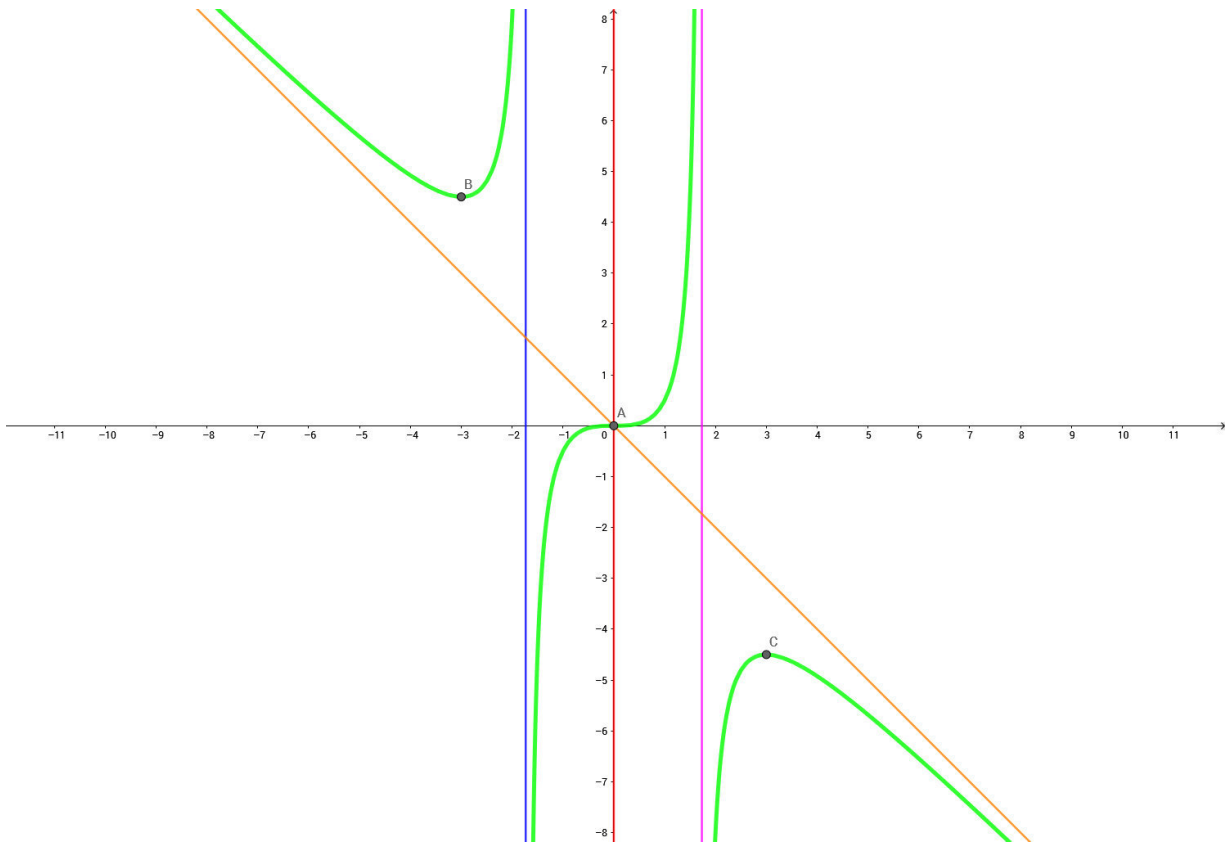
(t) $f(x) = \ln(x^2 + 1)$

(u) $f(x) = x \ln x^2$

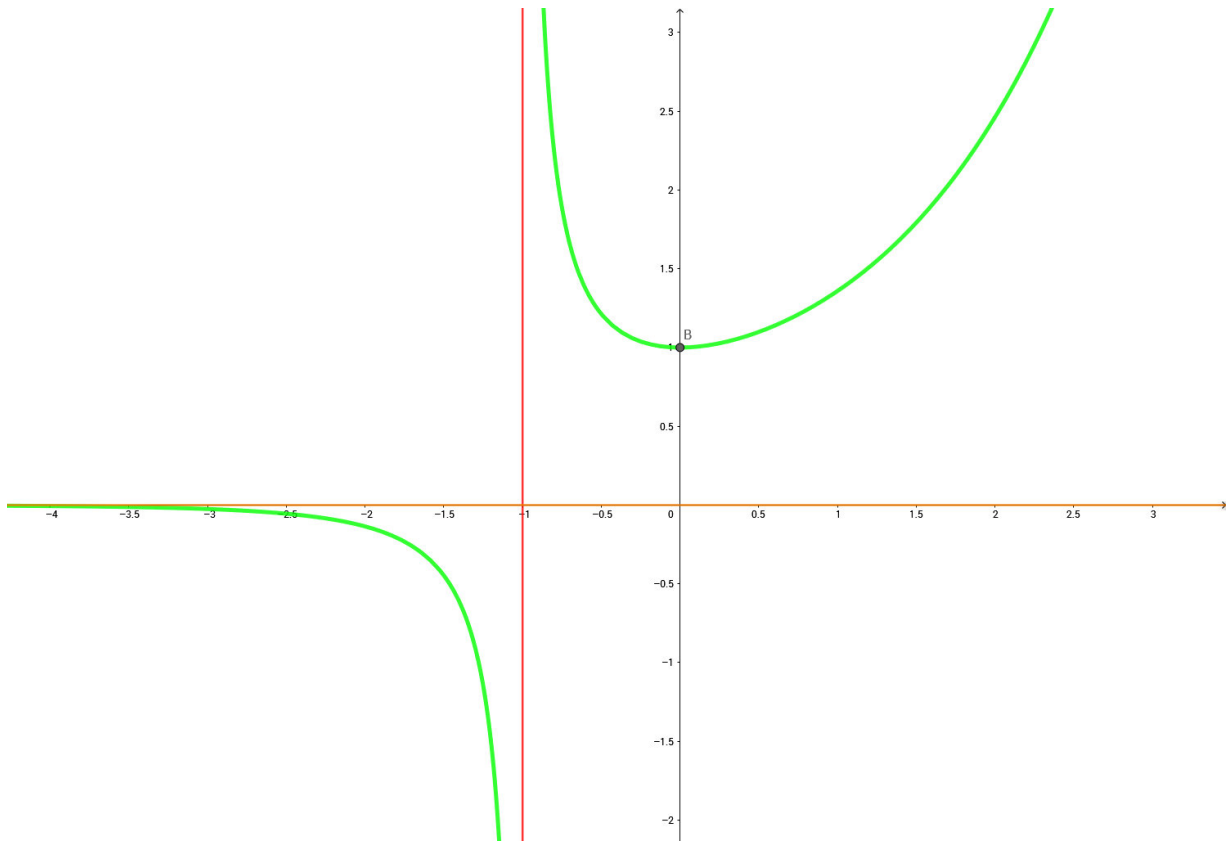
(a)



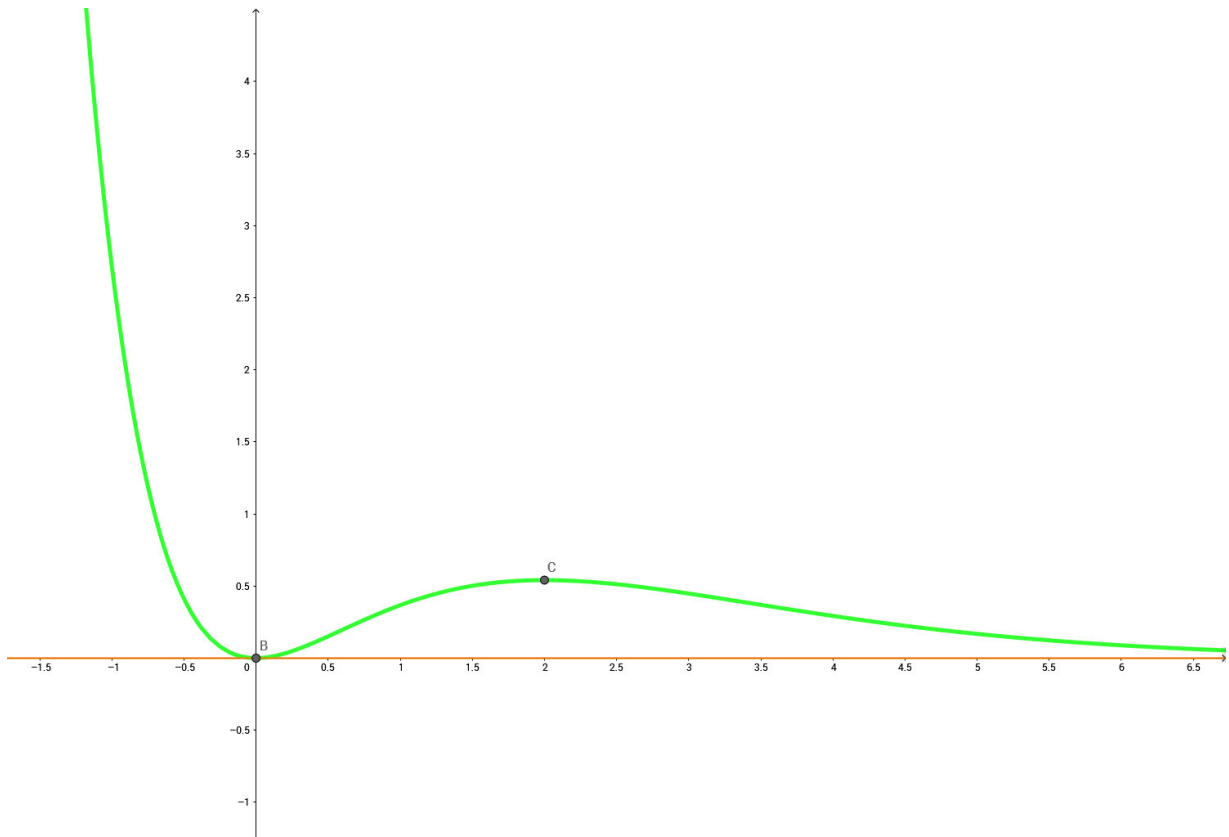
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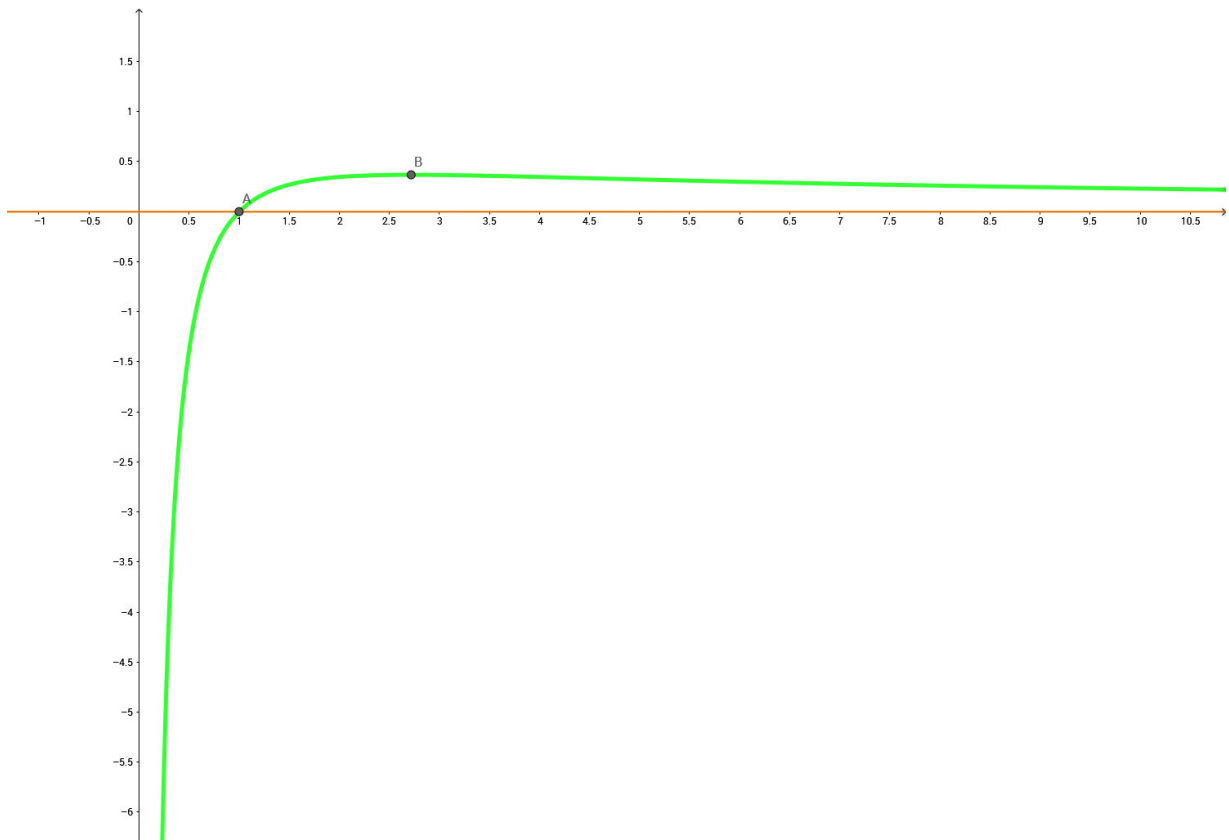
(c)



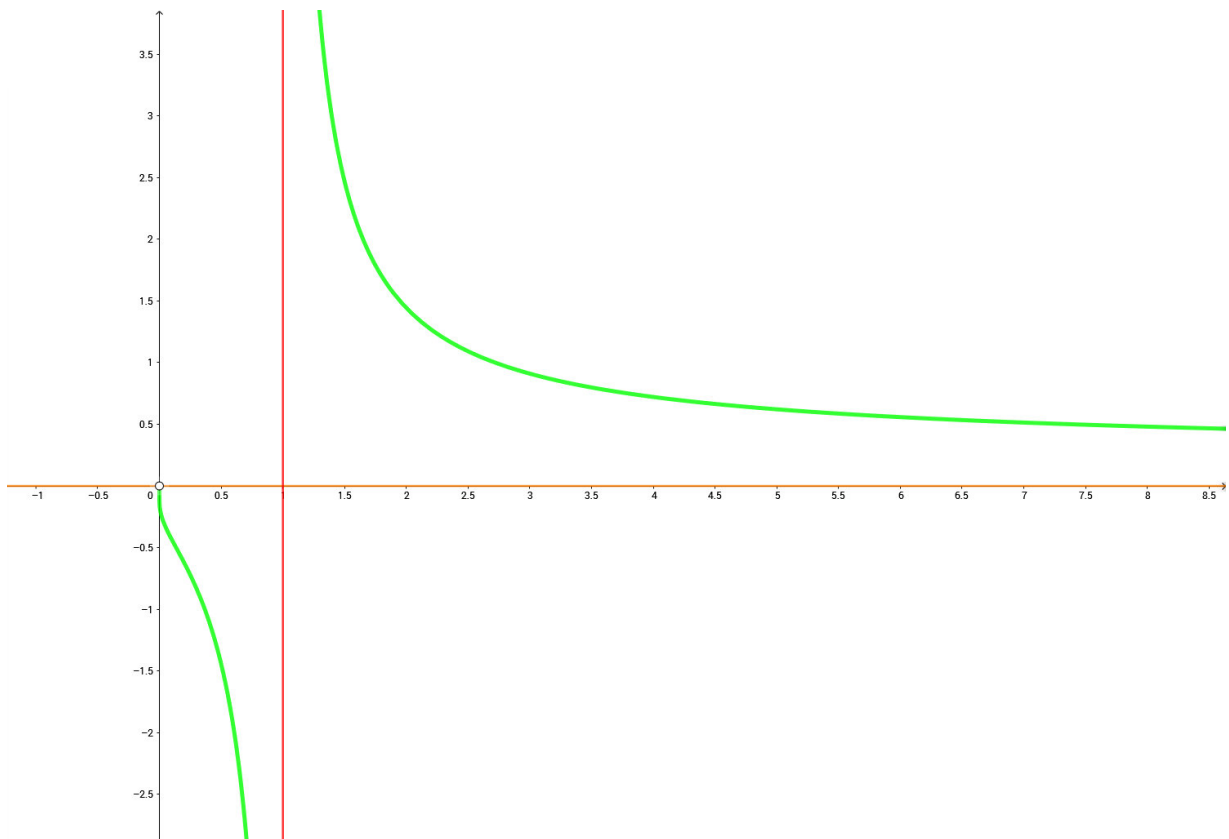
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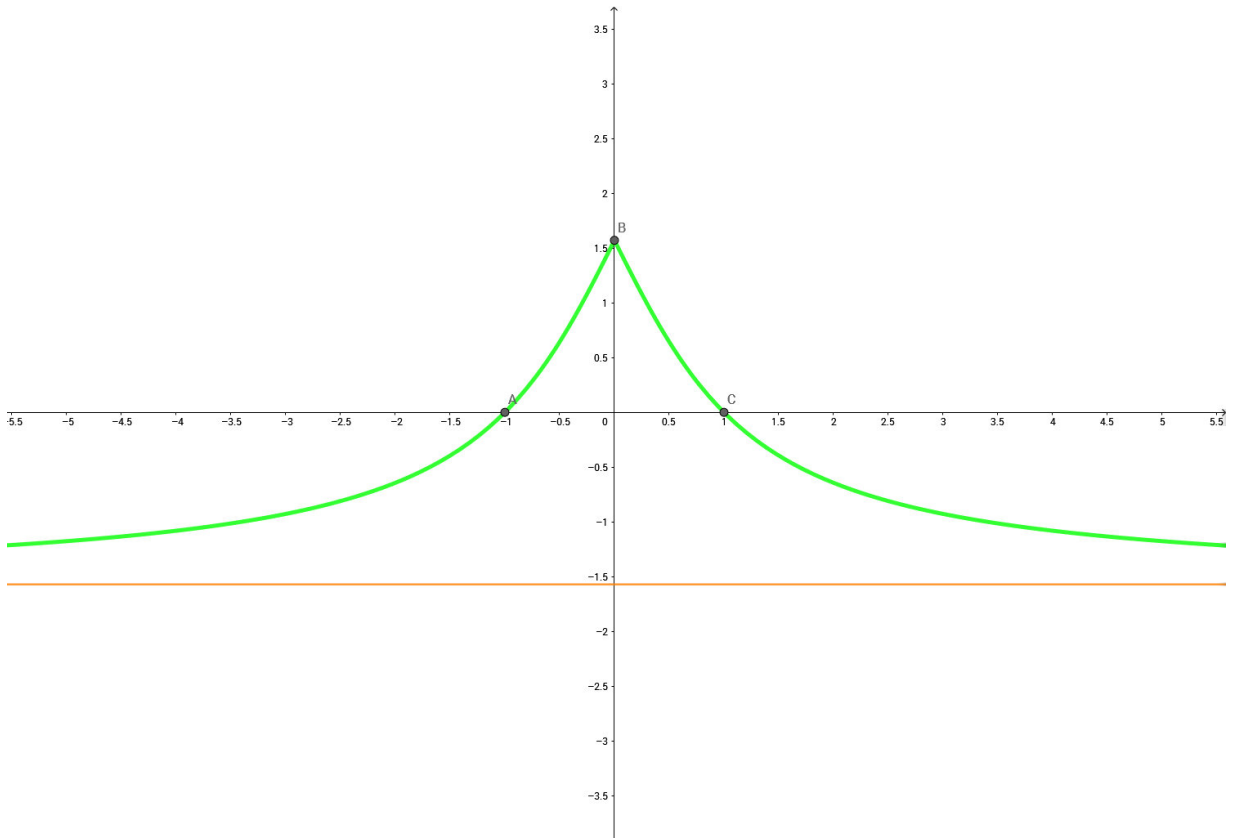
(e)



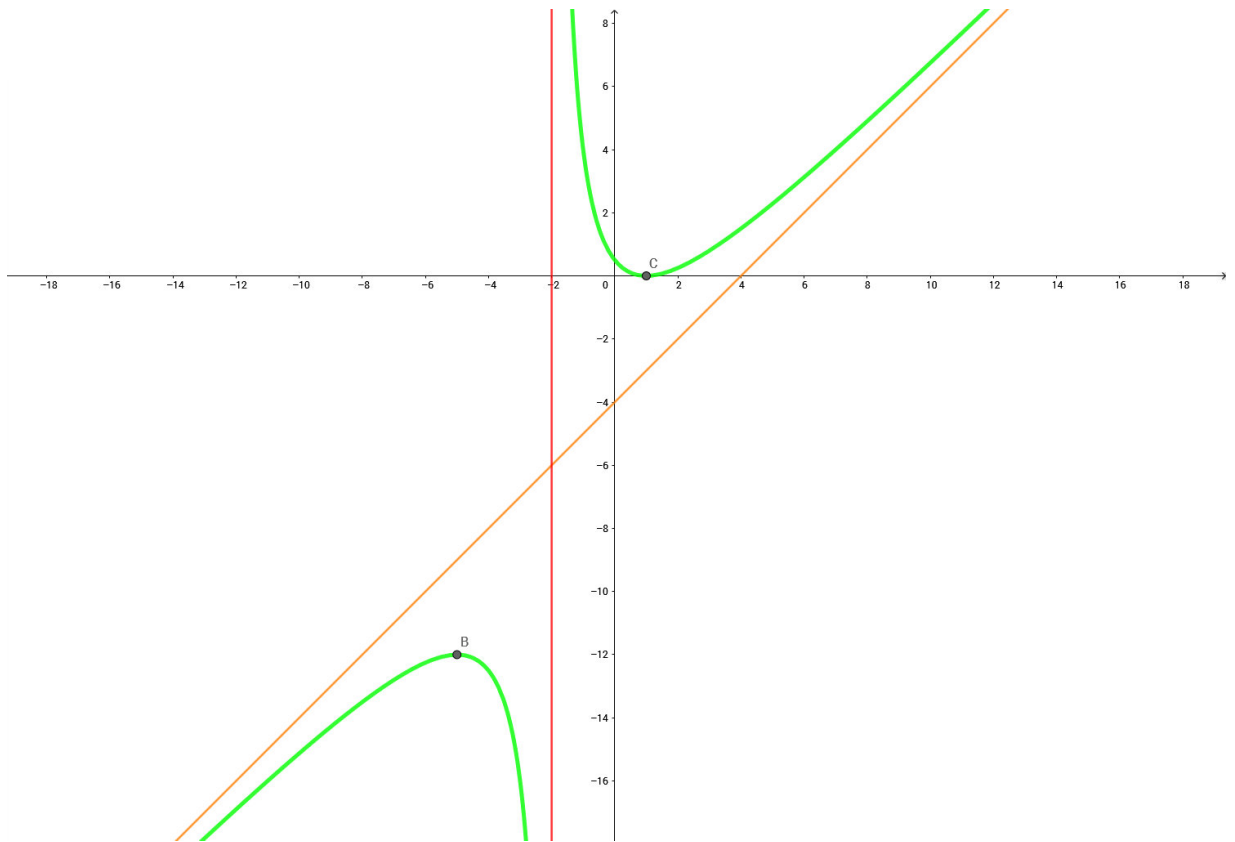
(f)



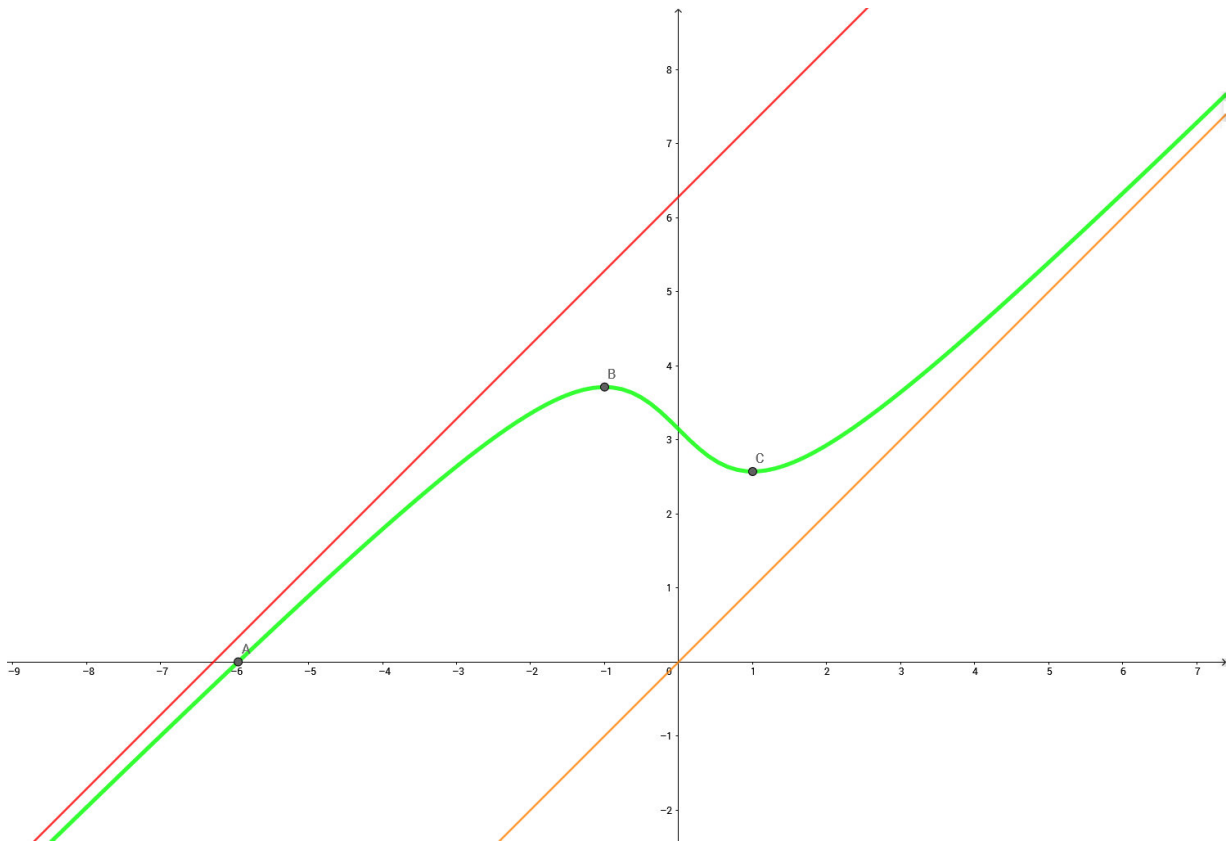
(g)



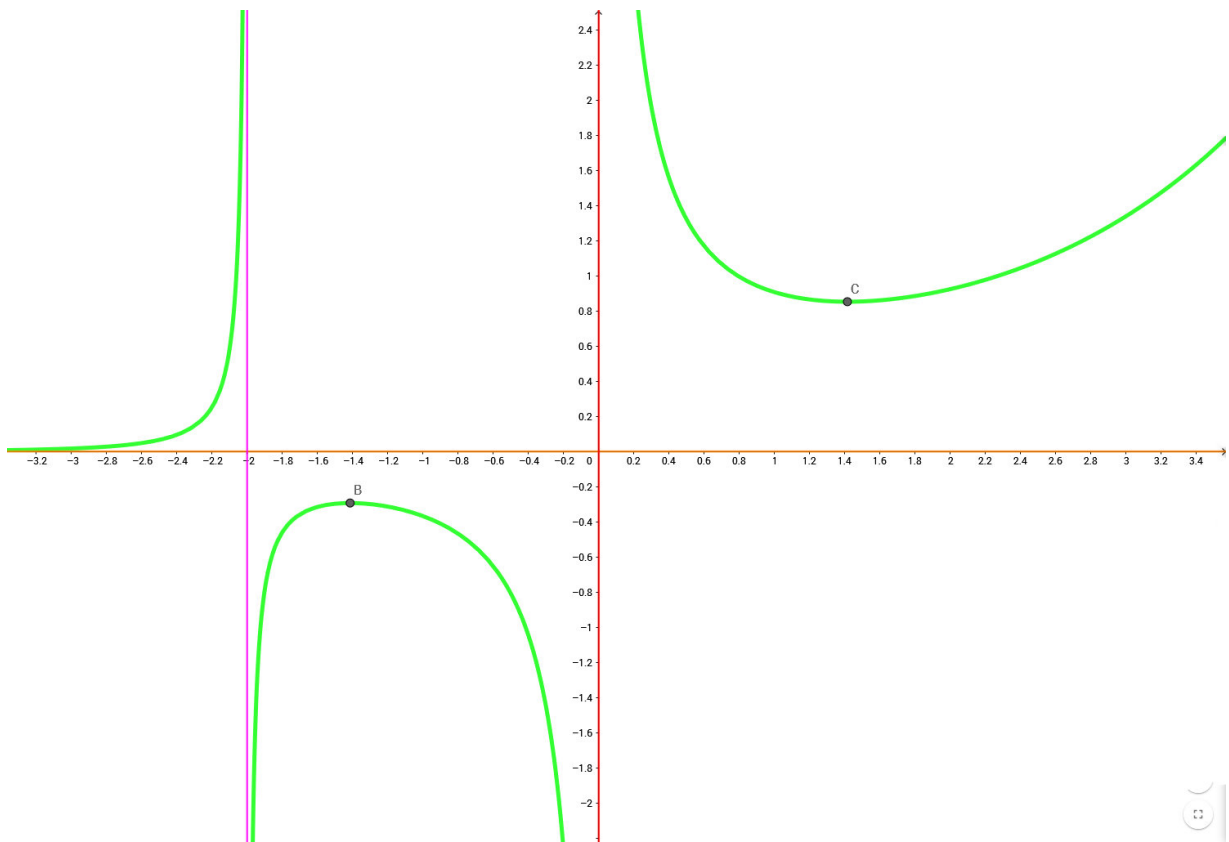
(h)



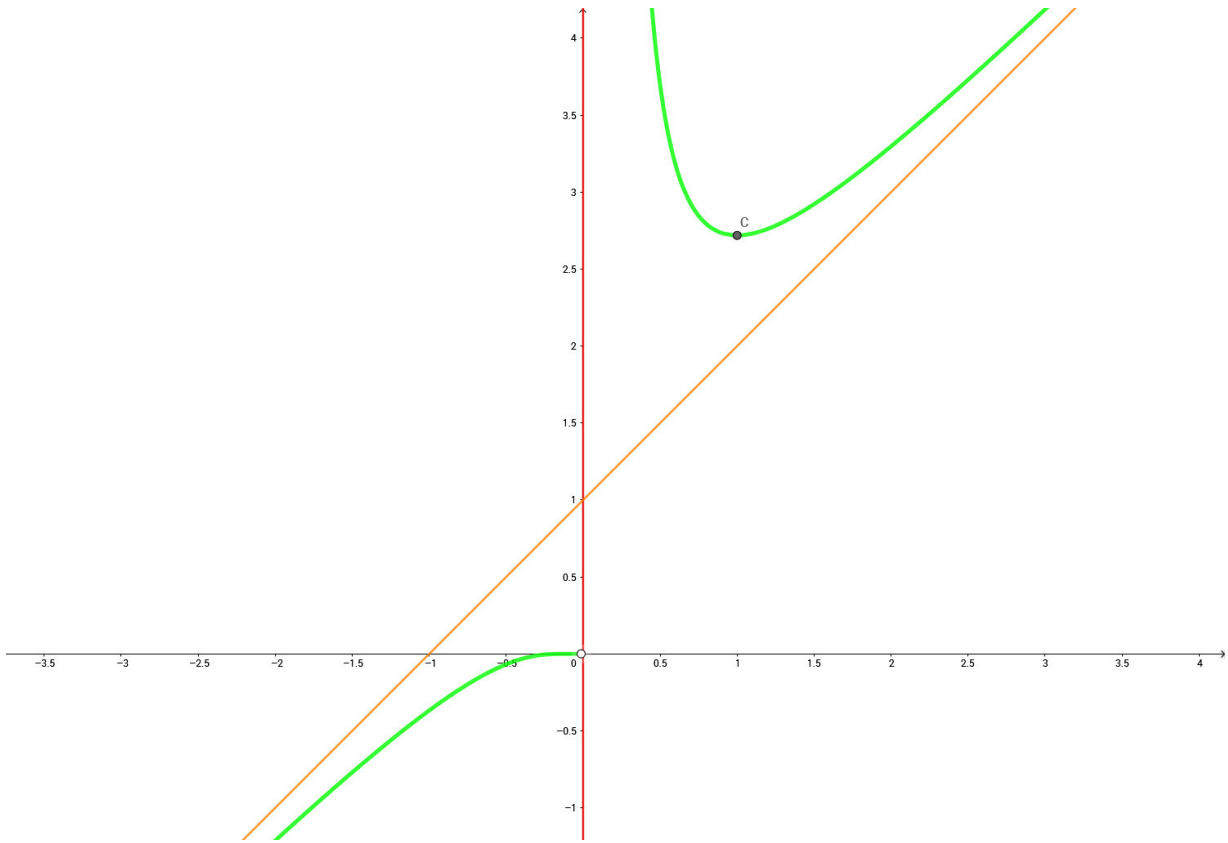
(i)



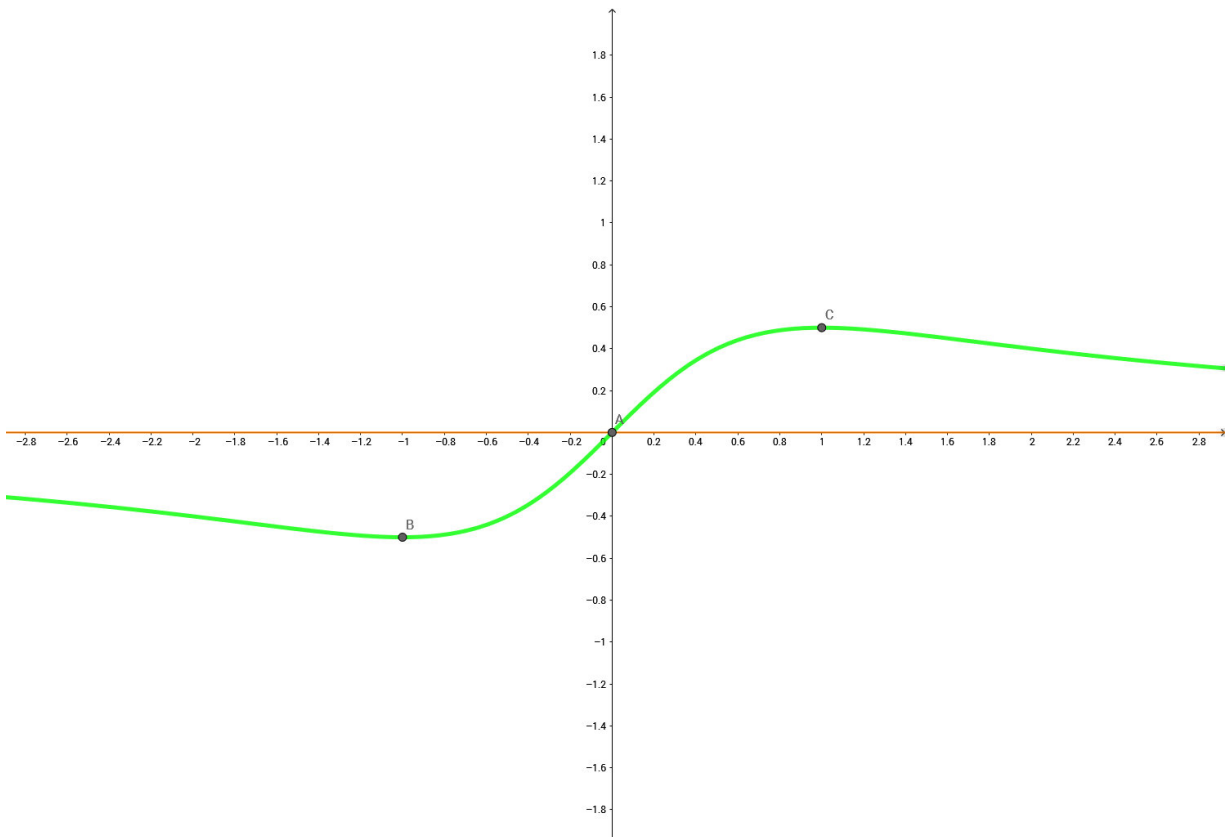
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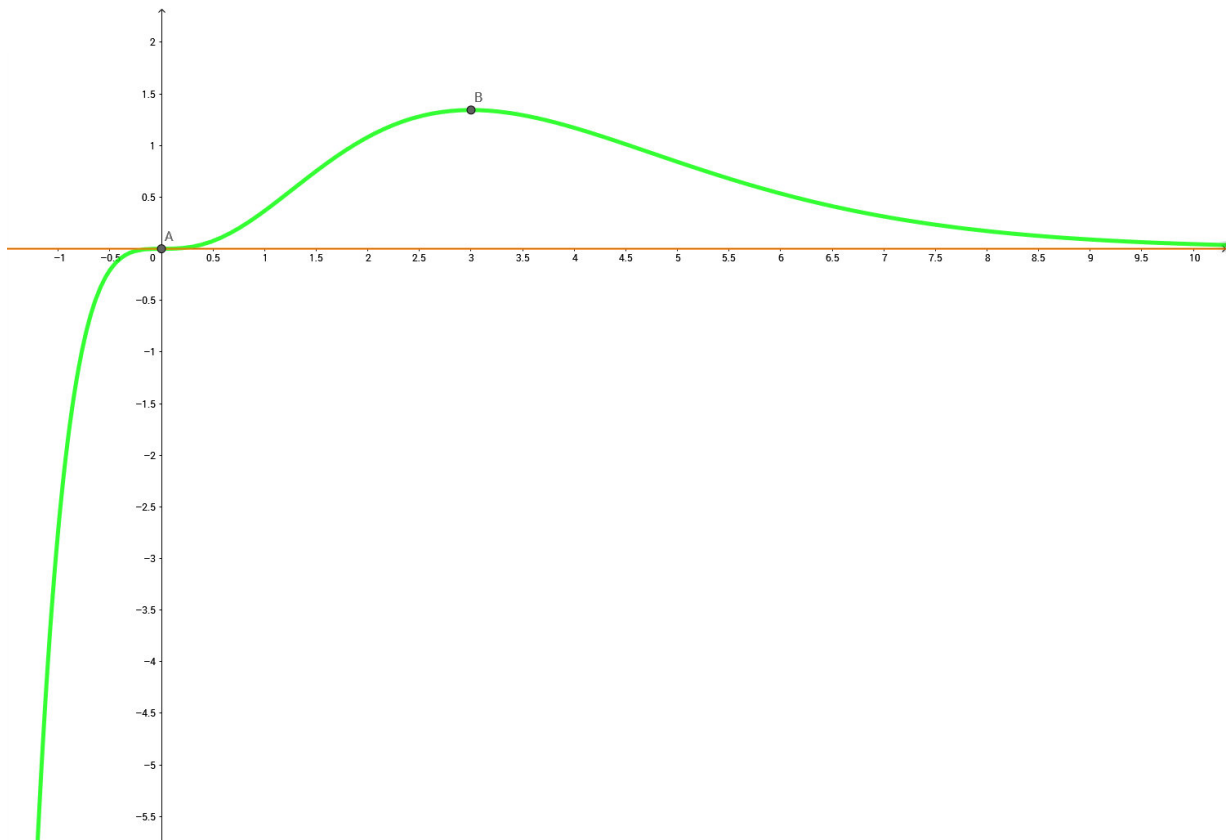
(k)



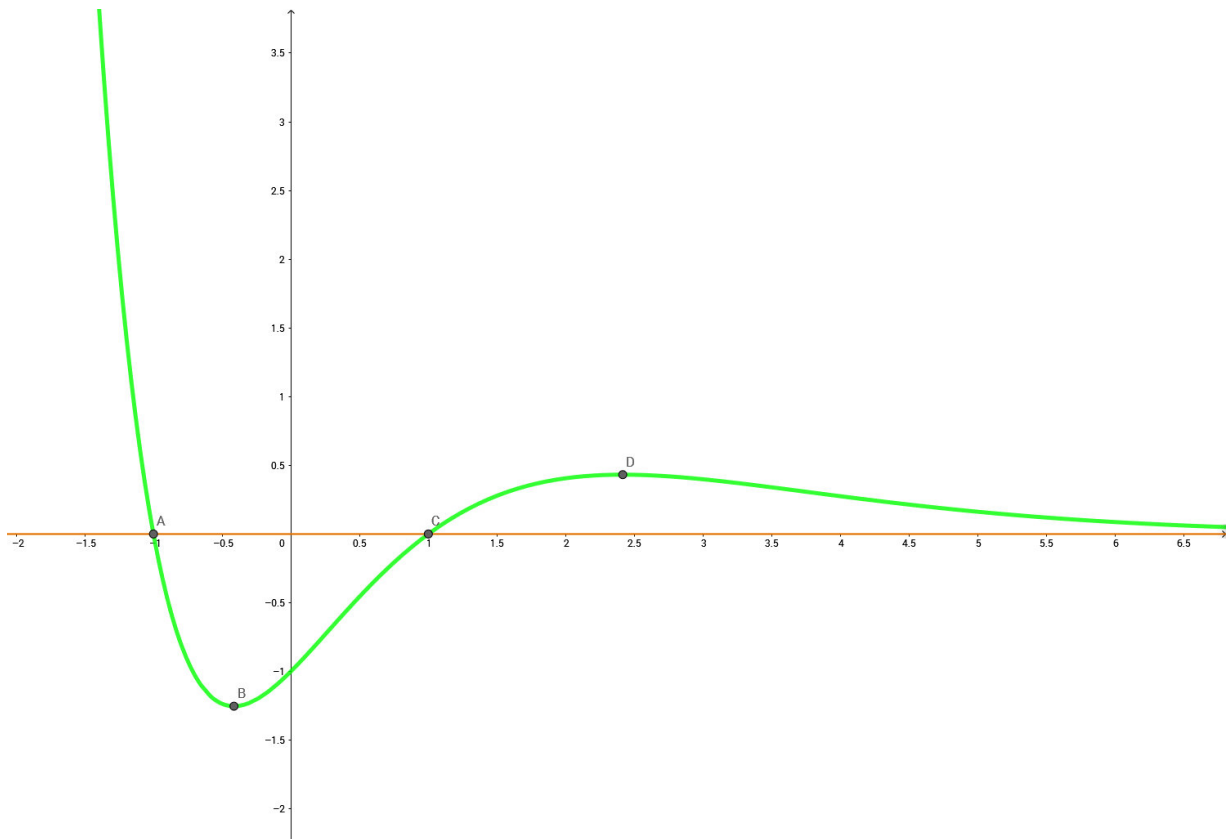
(l)



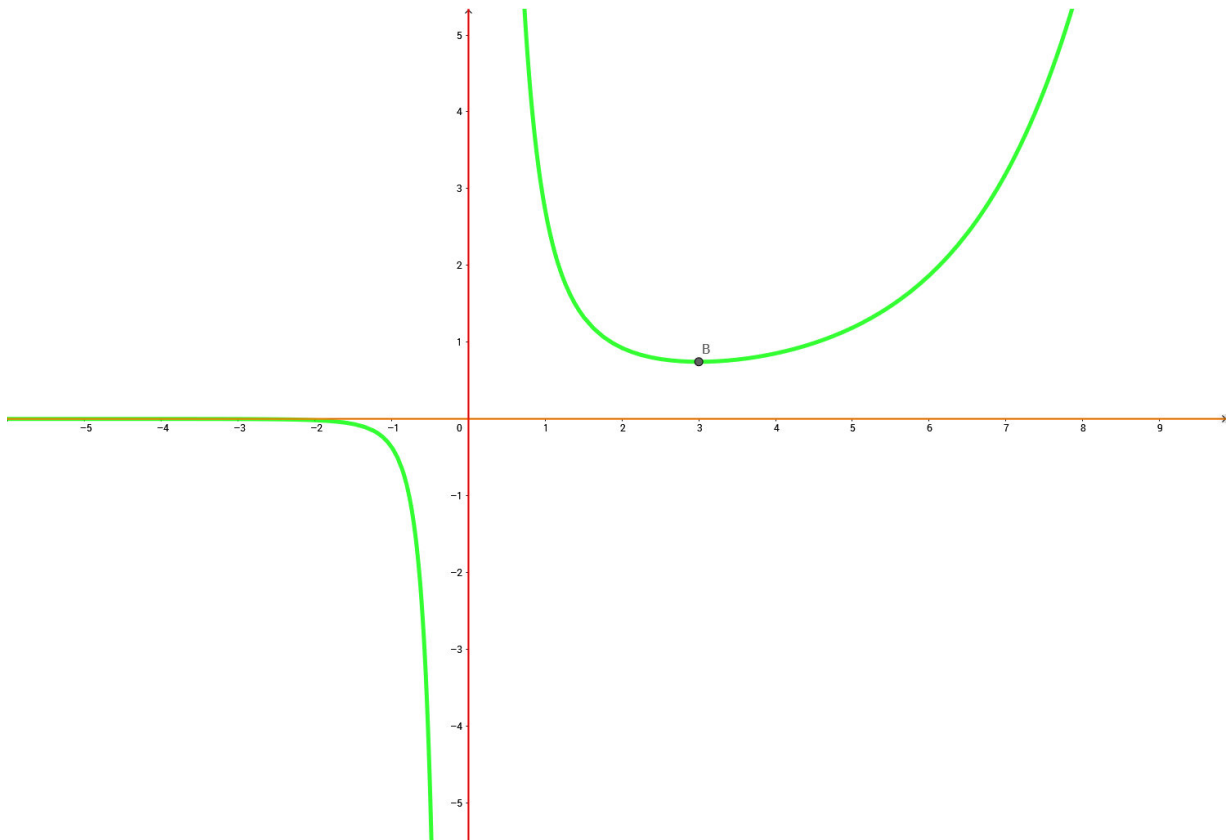
(m)



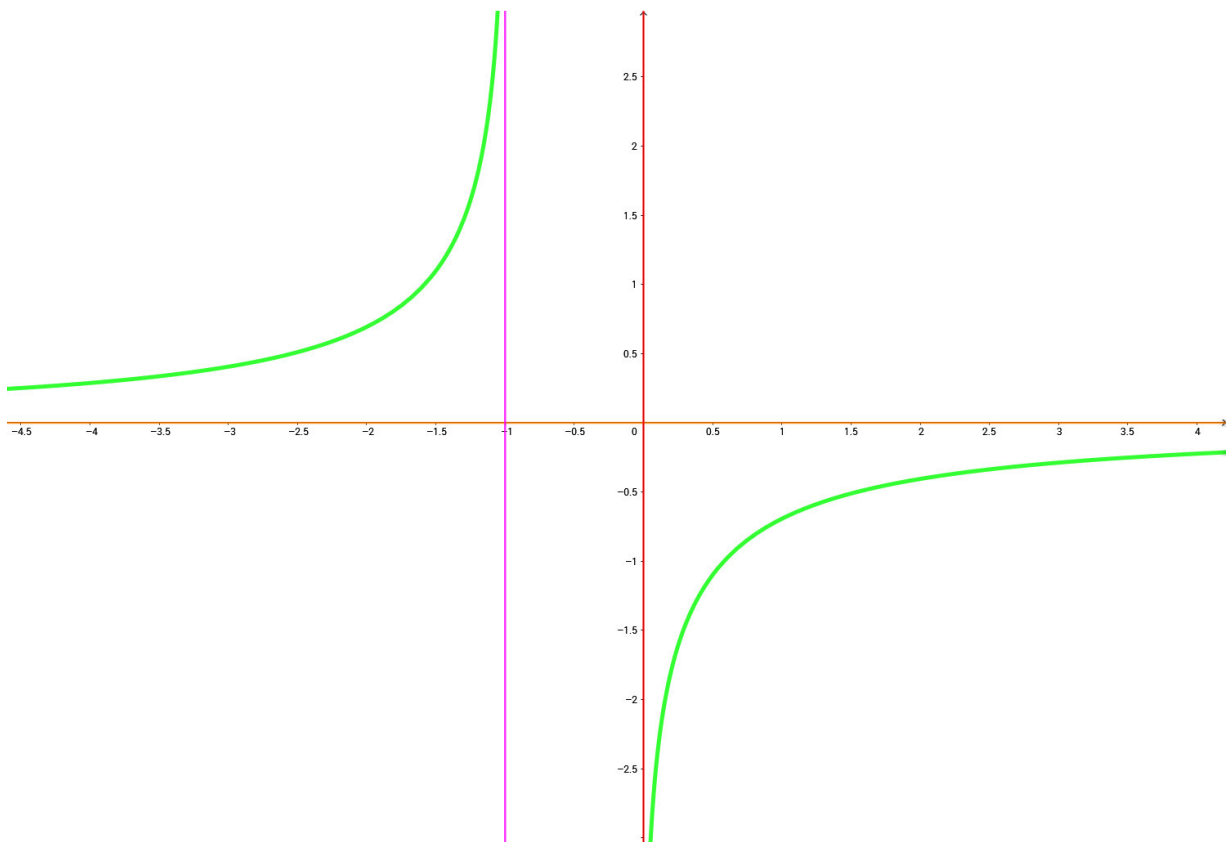
(n)



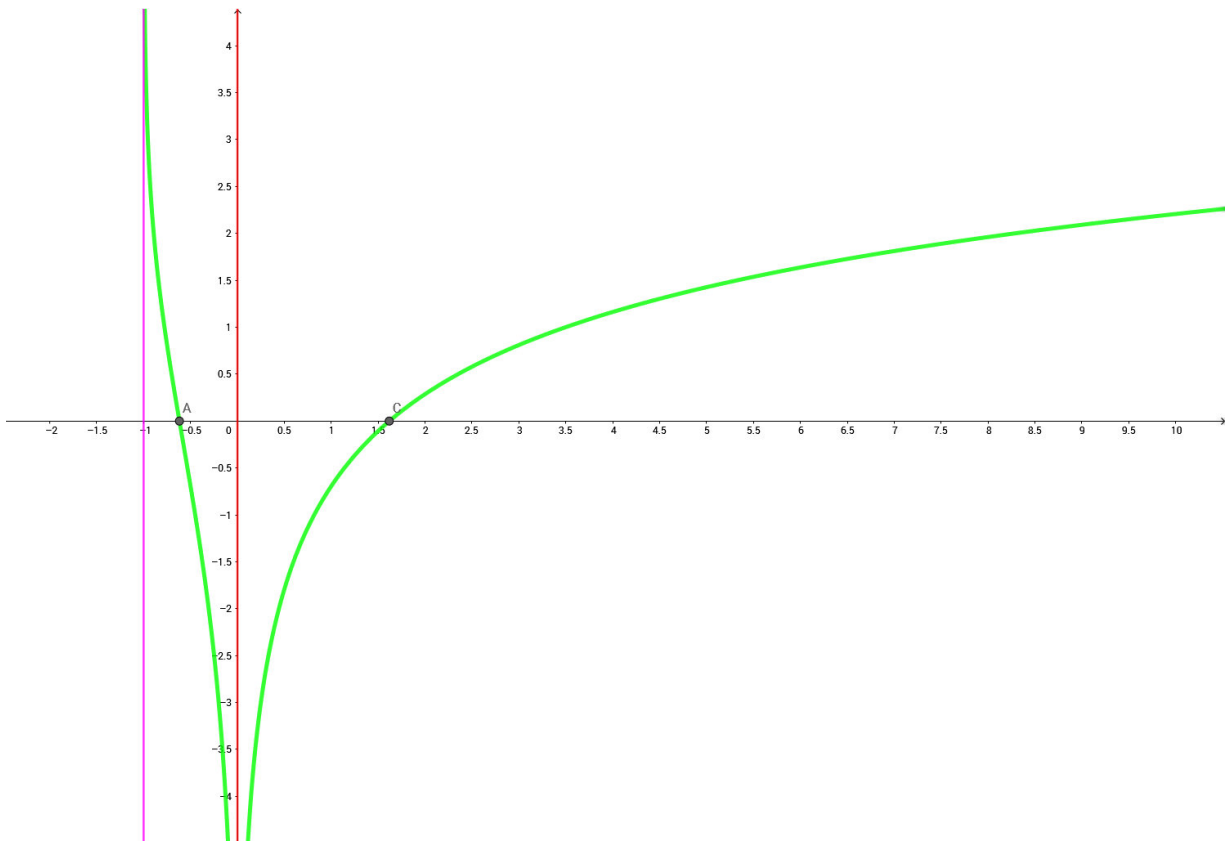
(o)



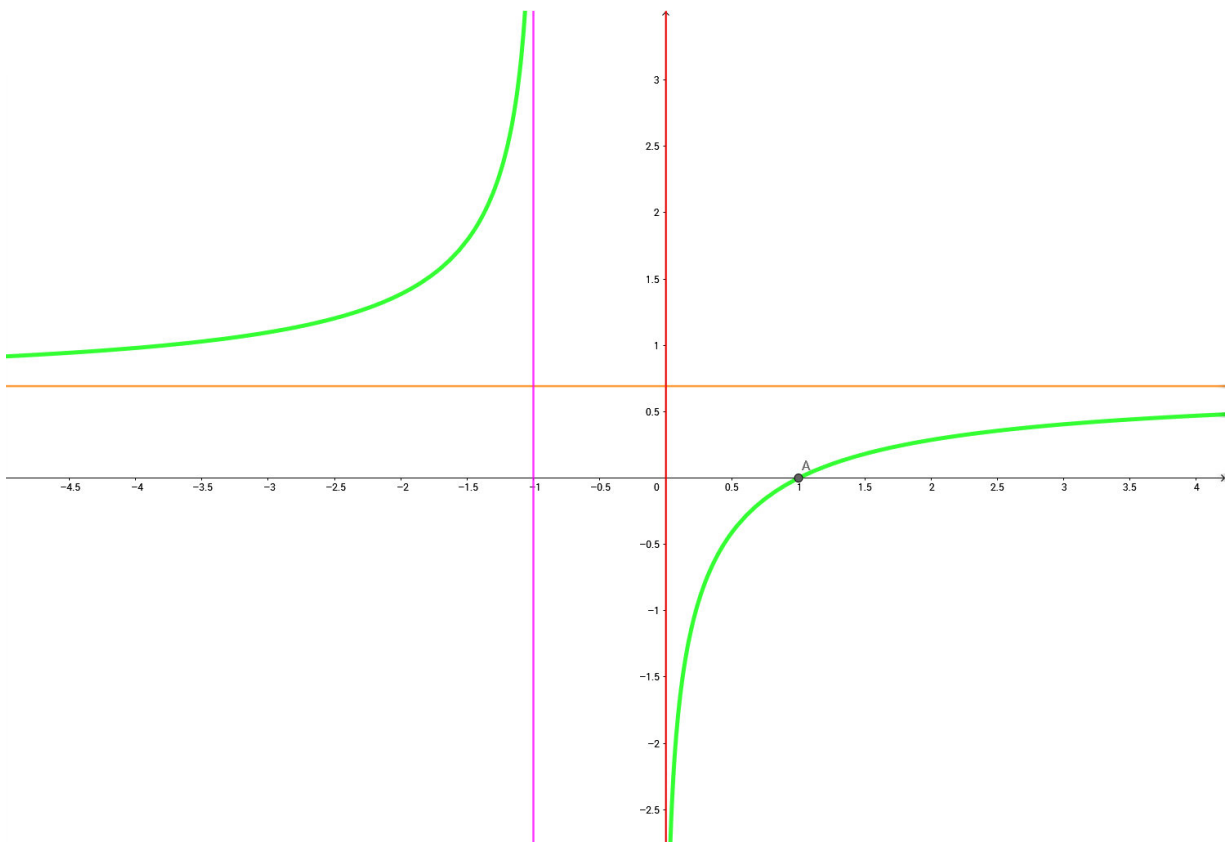
(p)



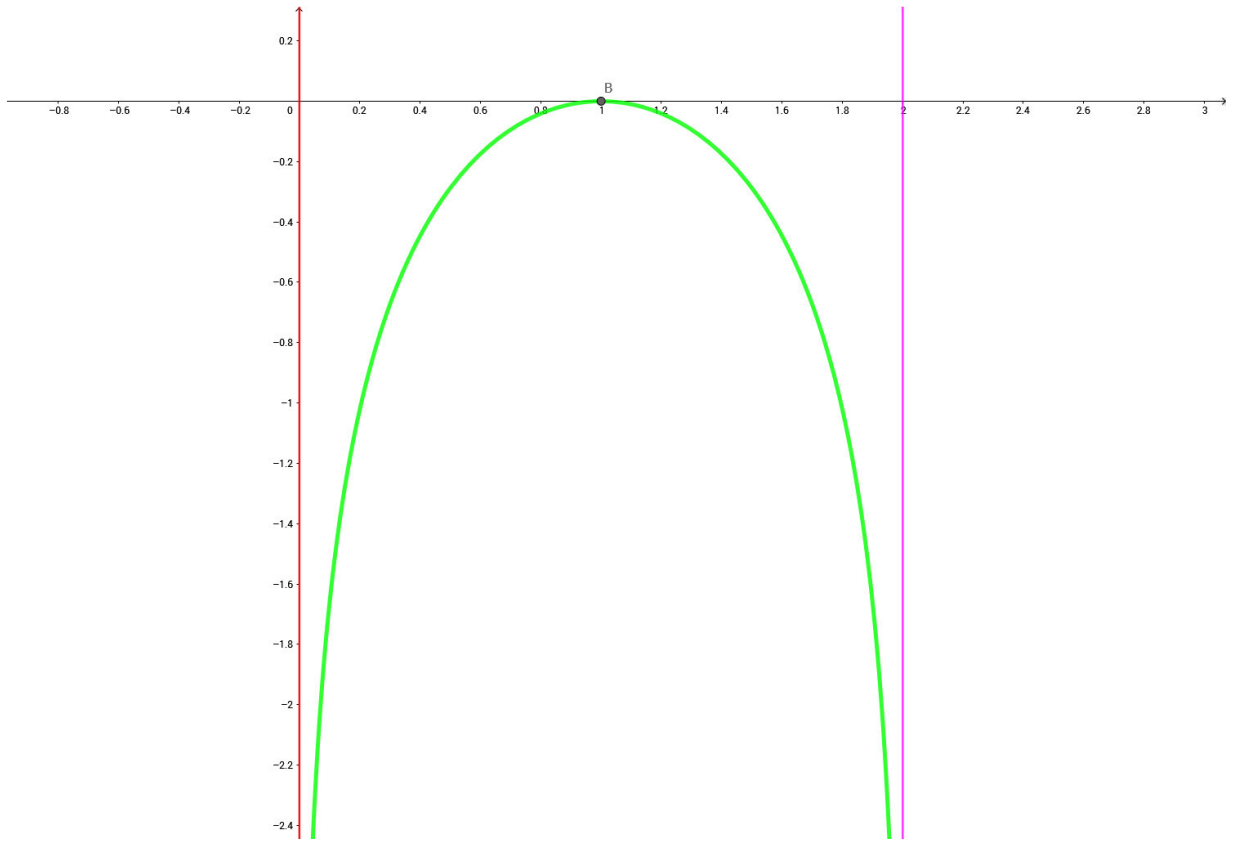
(q)



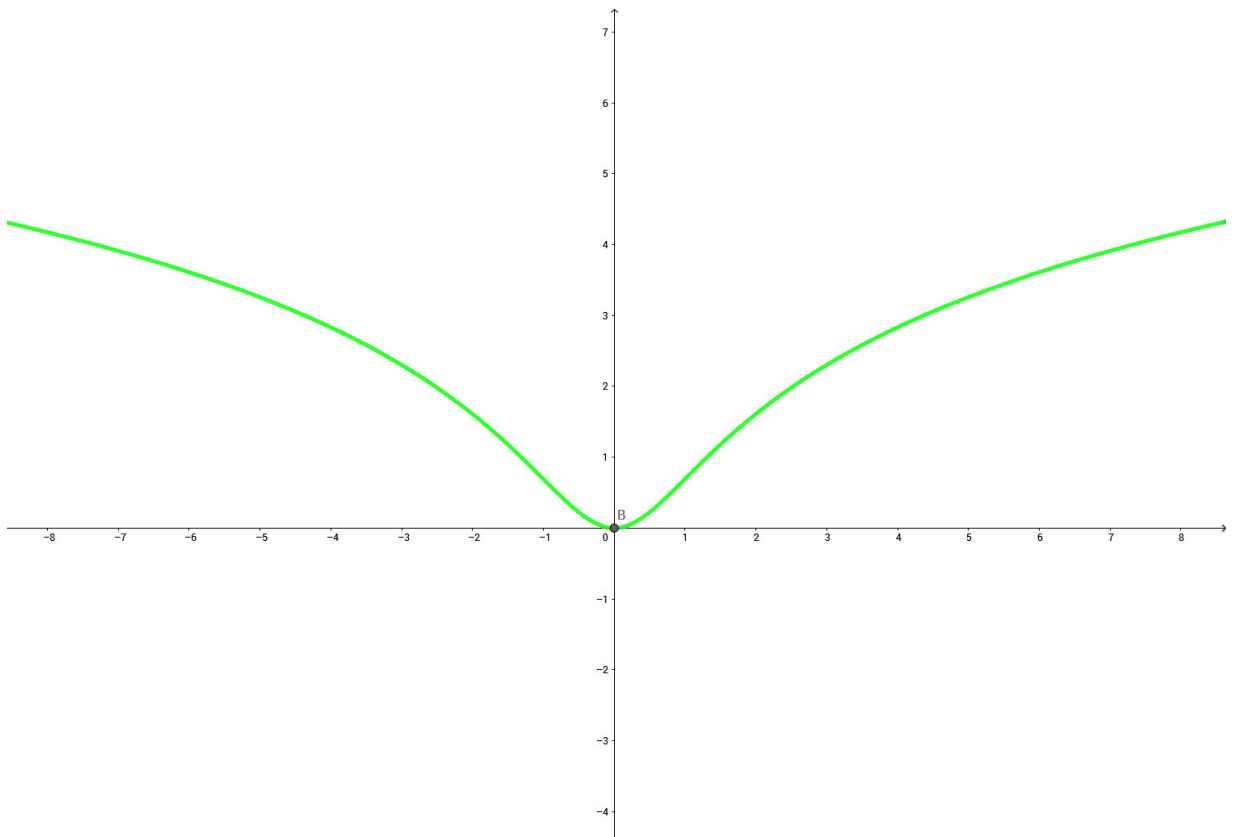
(r)



(s)



(t)



(u)

