

13. Průběhy funkcí

Příklad 13.6 Určete průběh funkce:

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

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

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

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

5. $f(x) = \frac{\ln x}{x}$

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

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

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

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

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

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

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

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

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

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

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

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

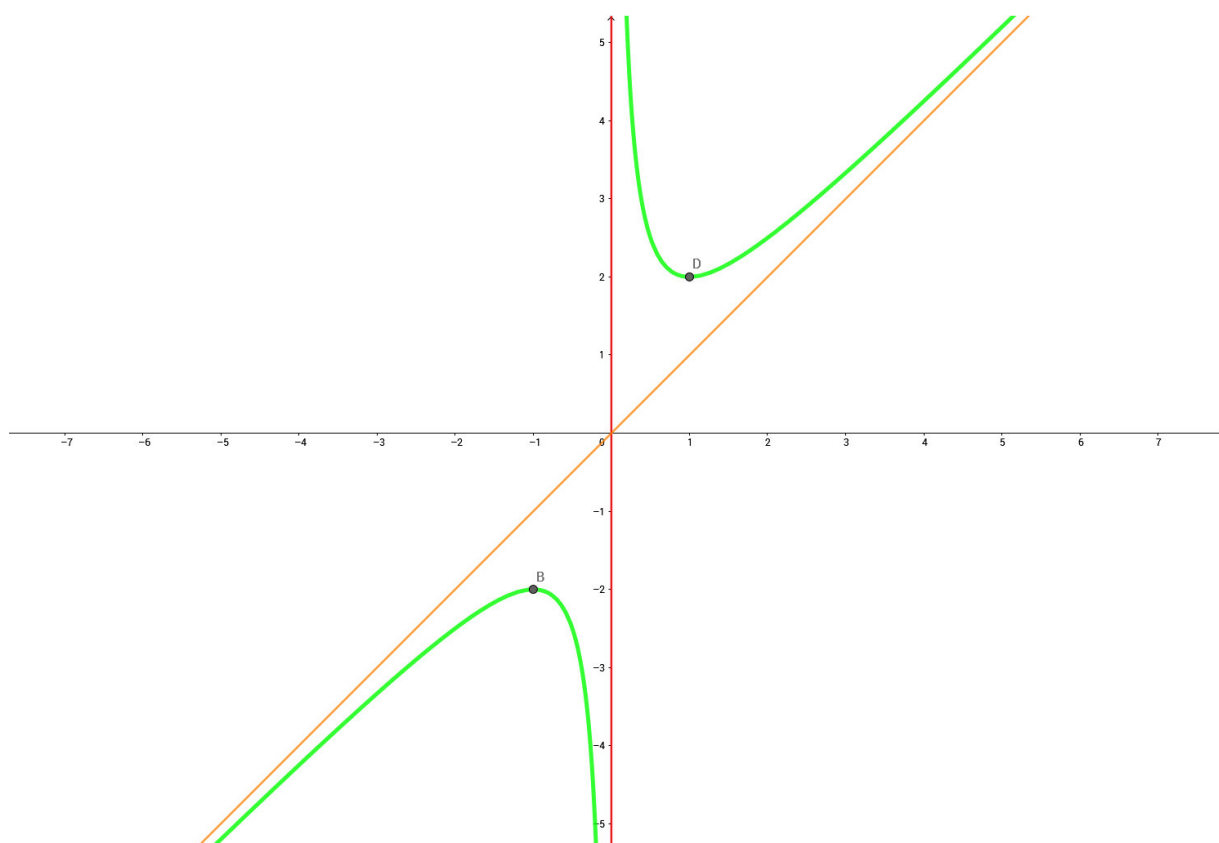
18. $f(x) = \ln \frac{2x}{x - 1}$

19. $f(x) = \ln(2x - x^2)$

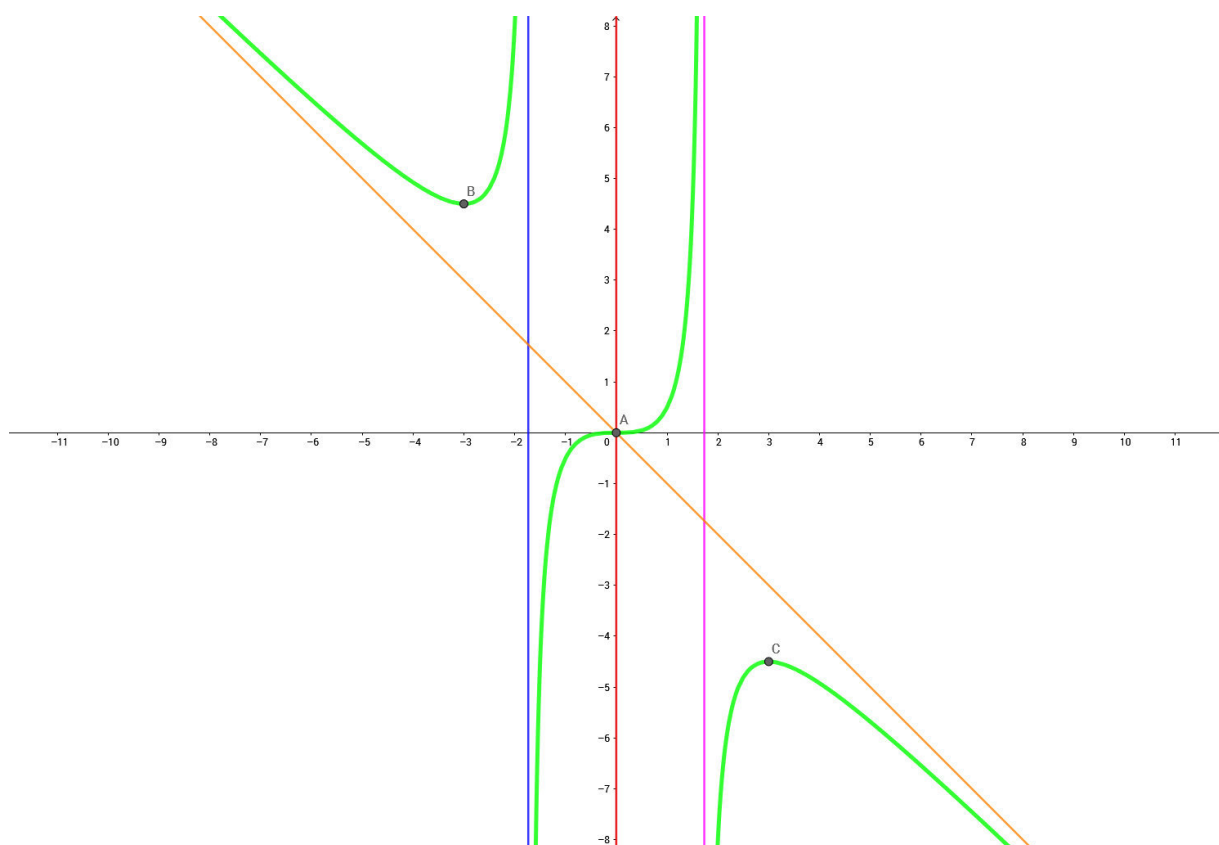
20. $f(x) = \ln(x^2 + 1)$

21. $f(x) = x \ln x^2$

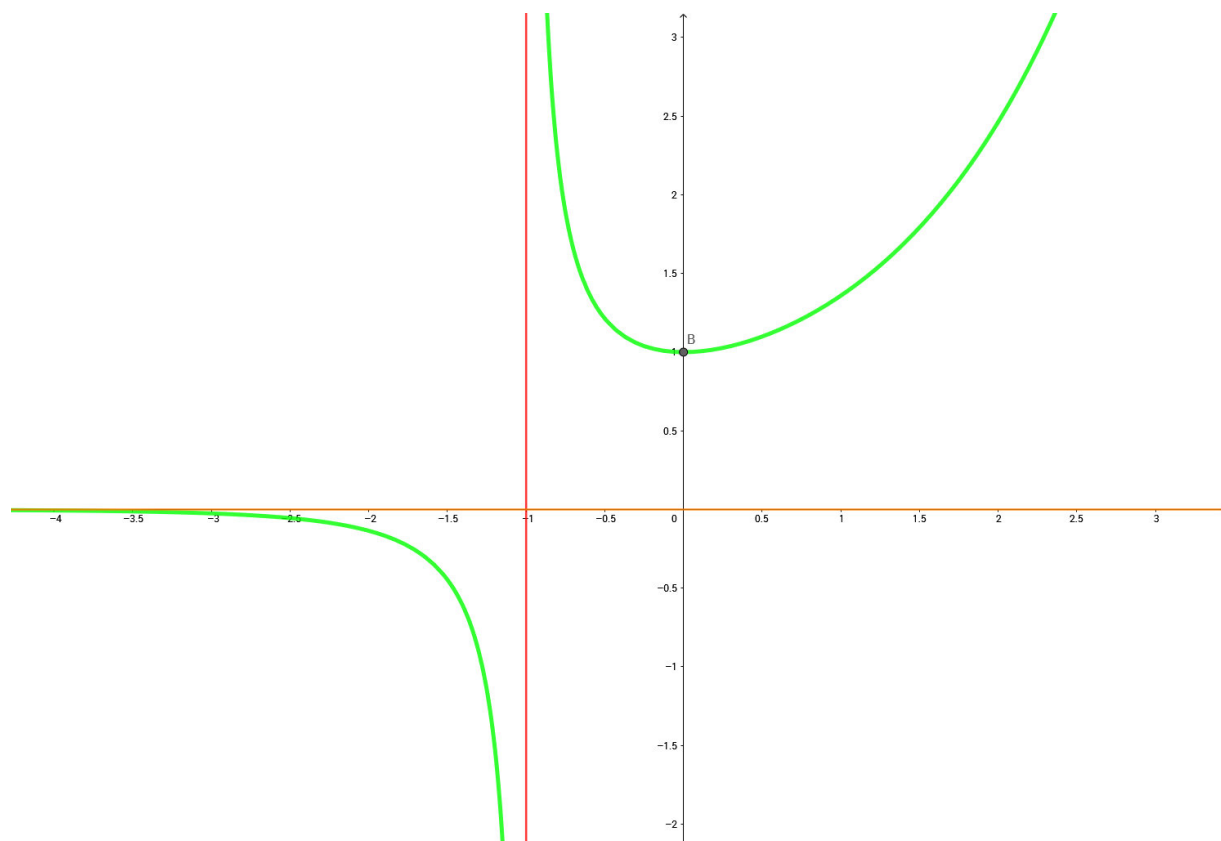
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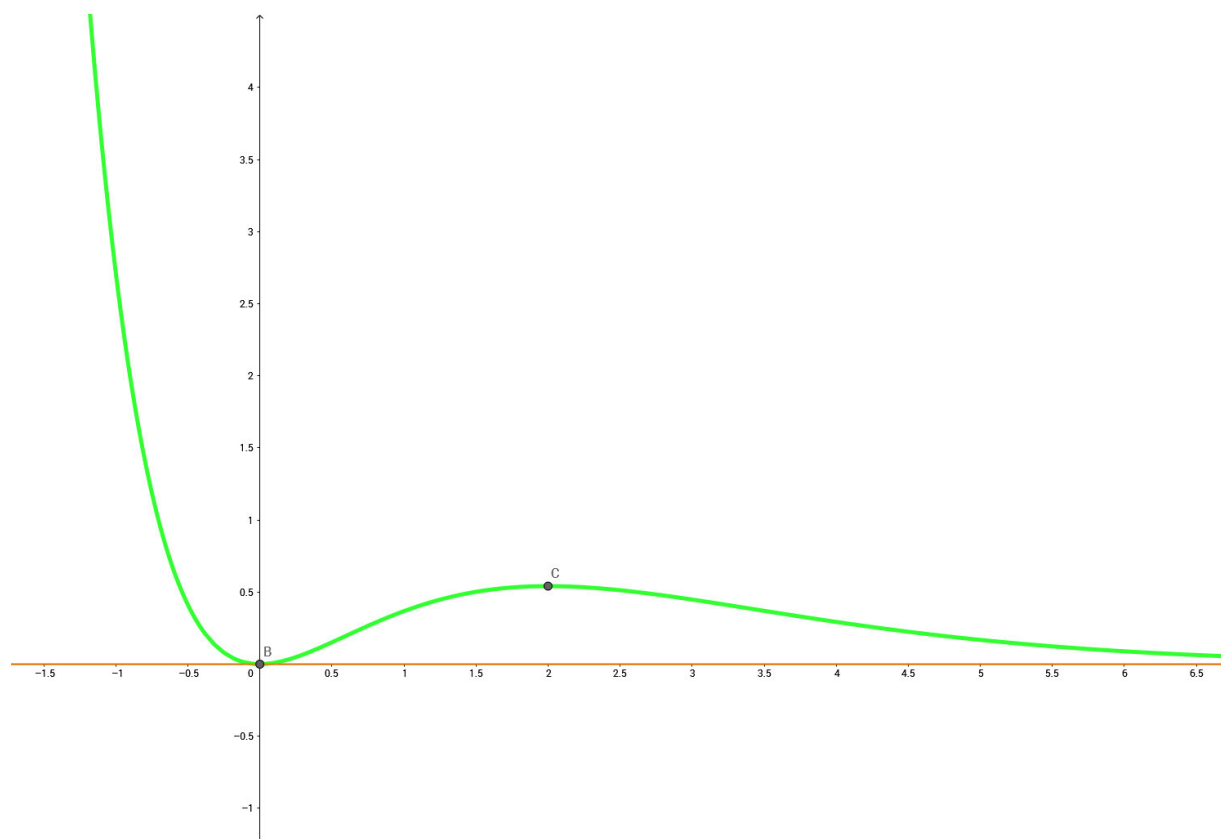
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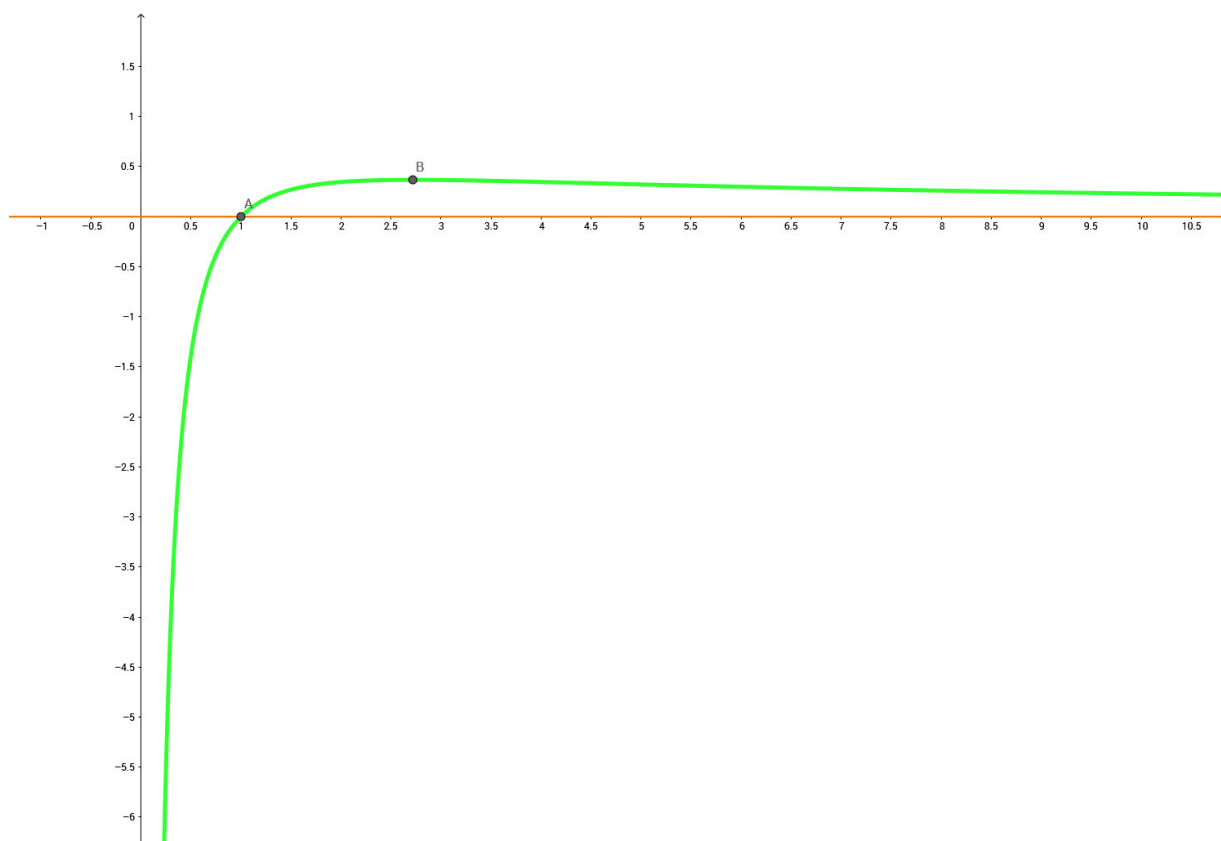
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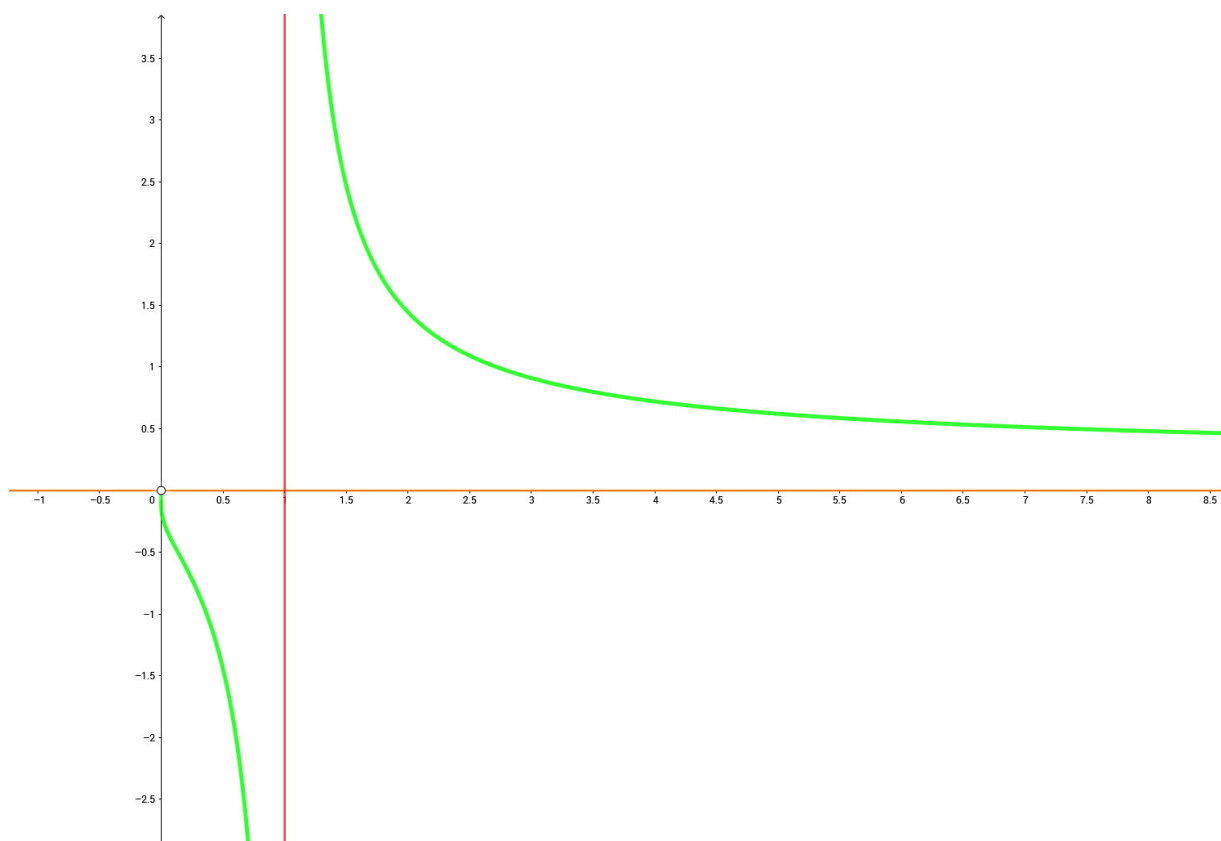
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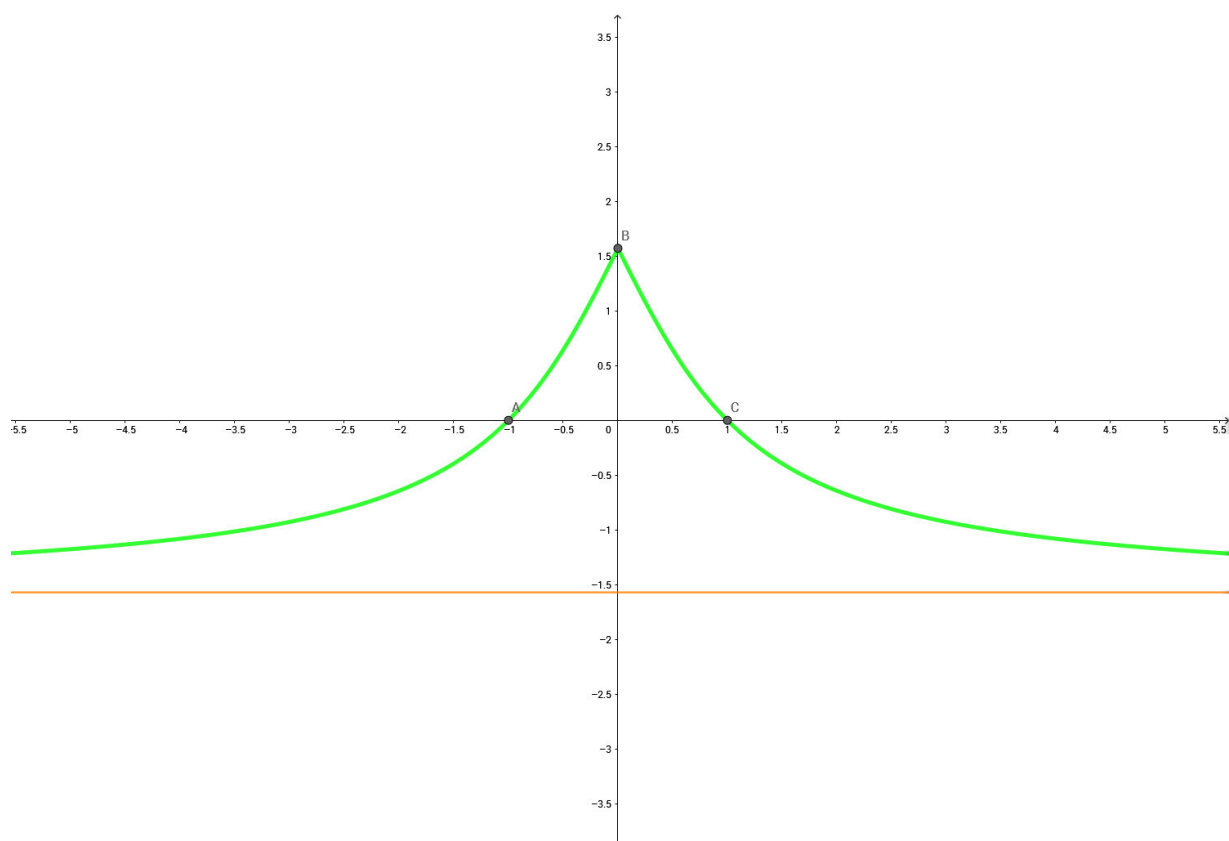
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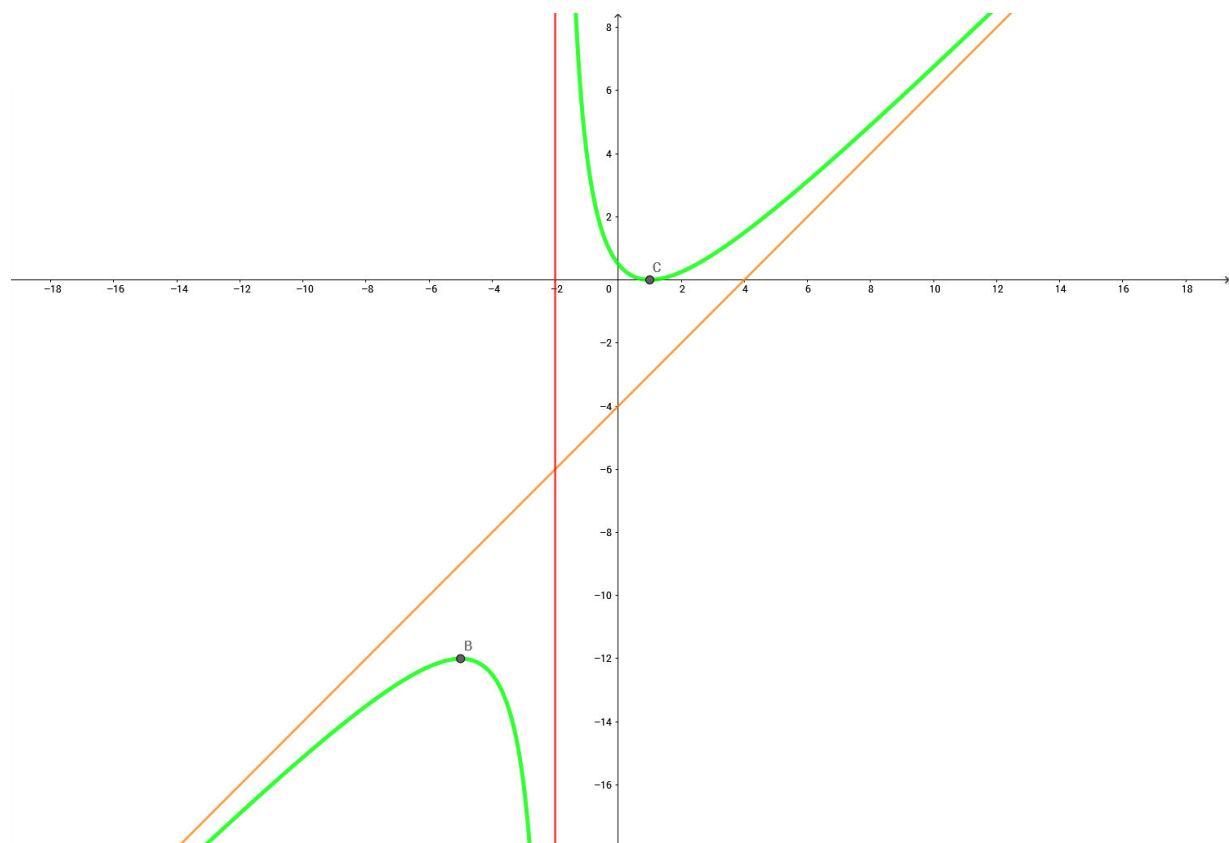
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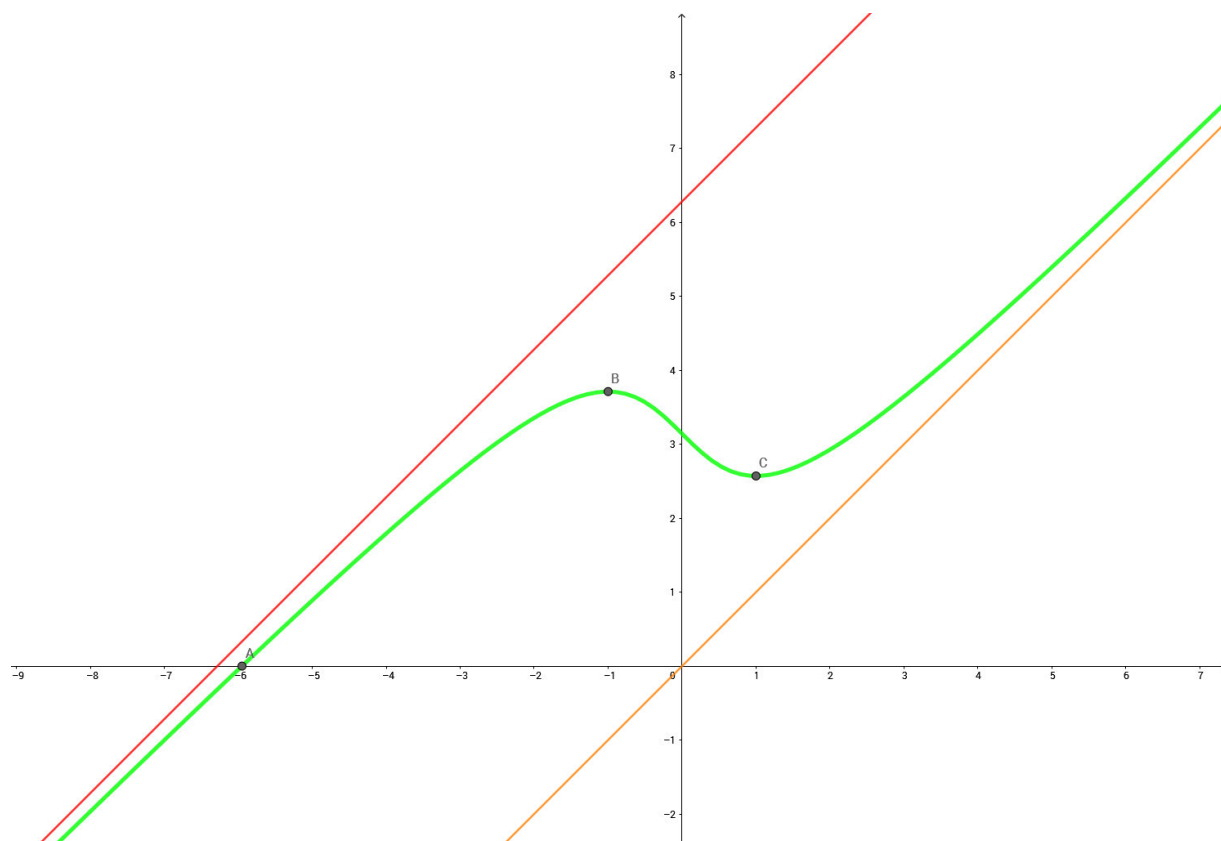
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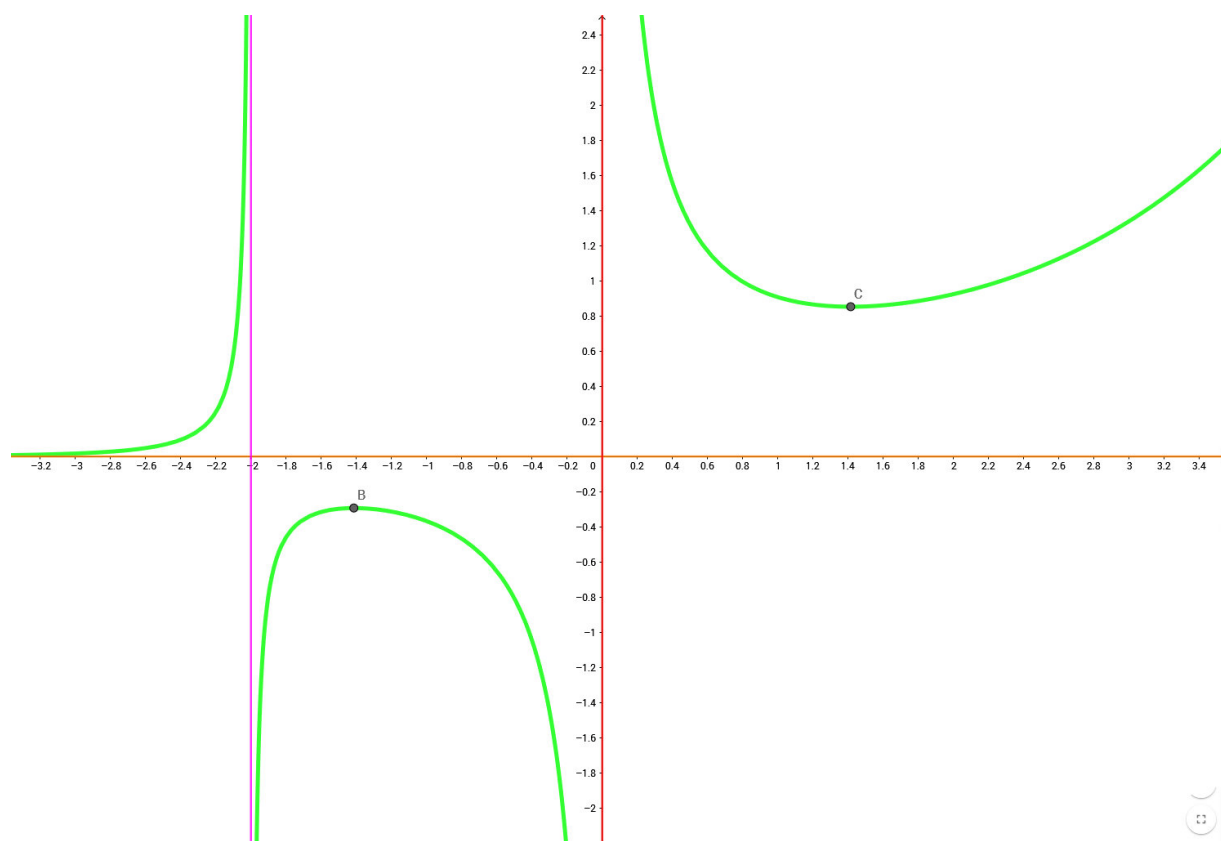
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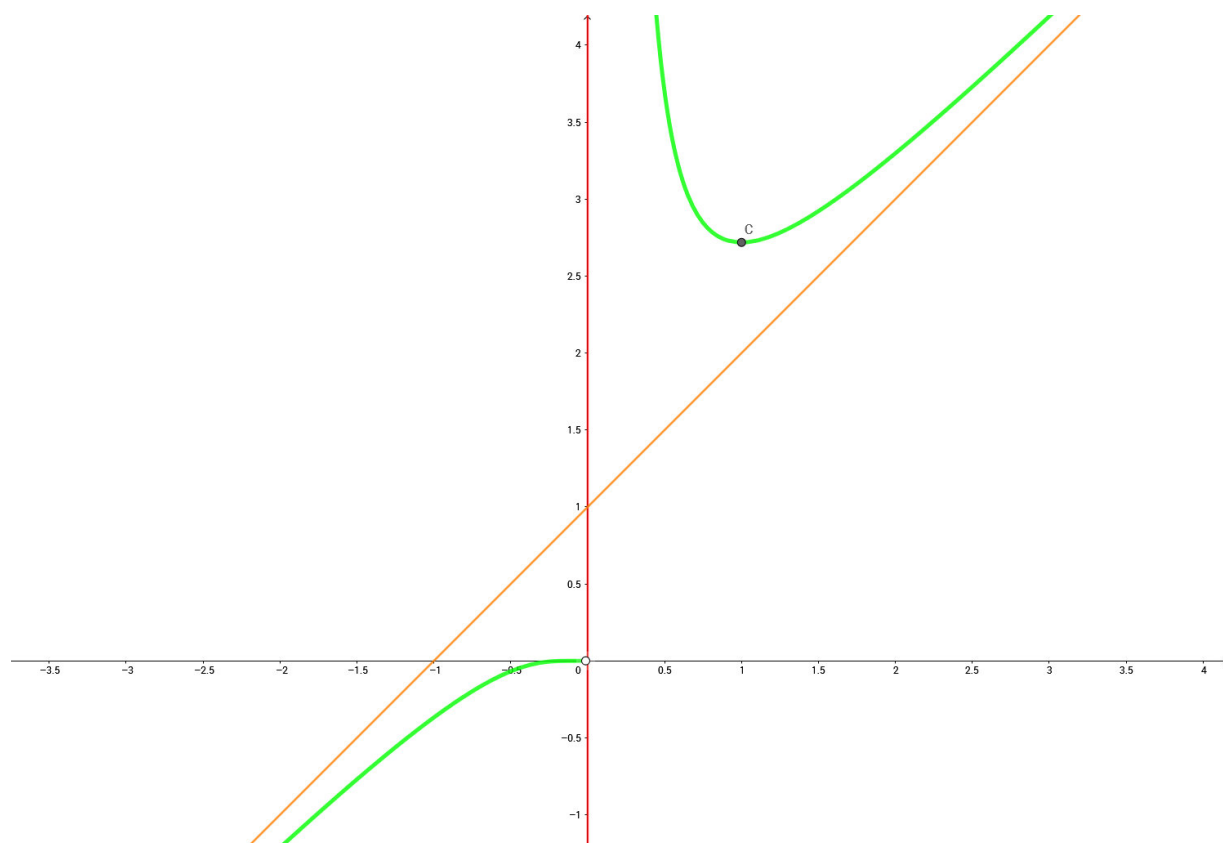
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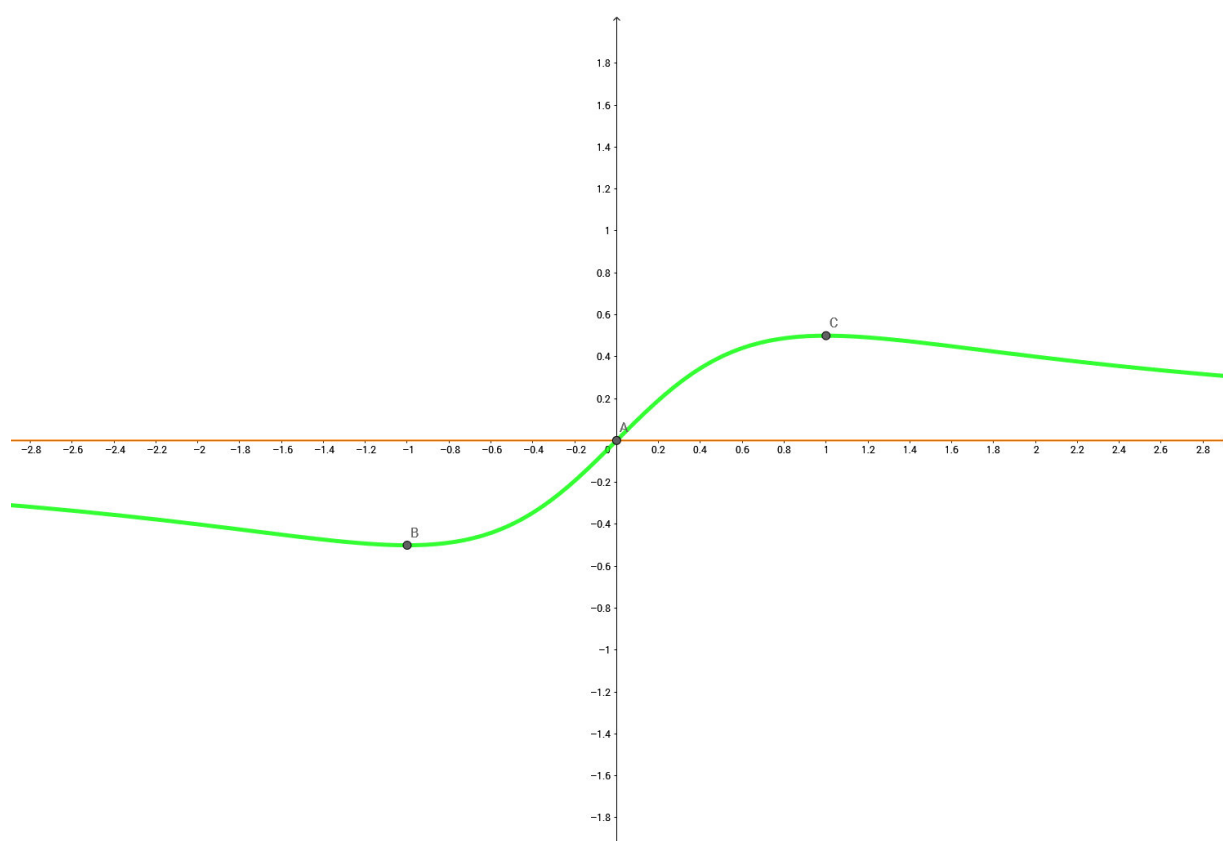
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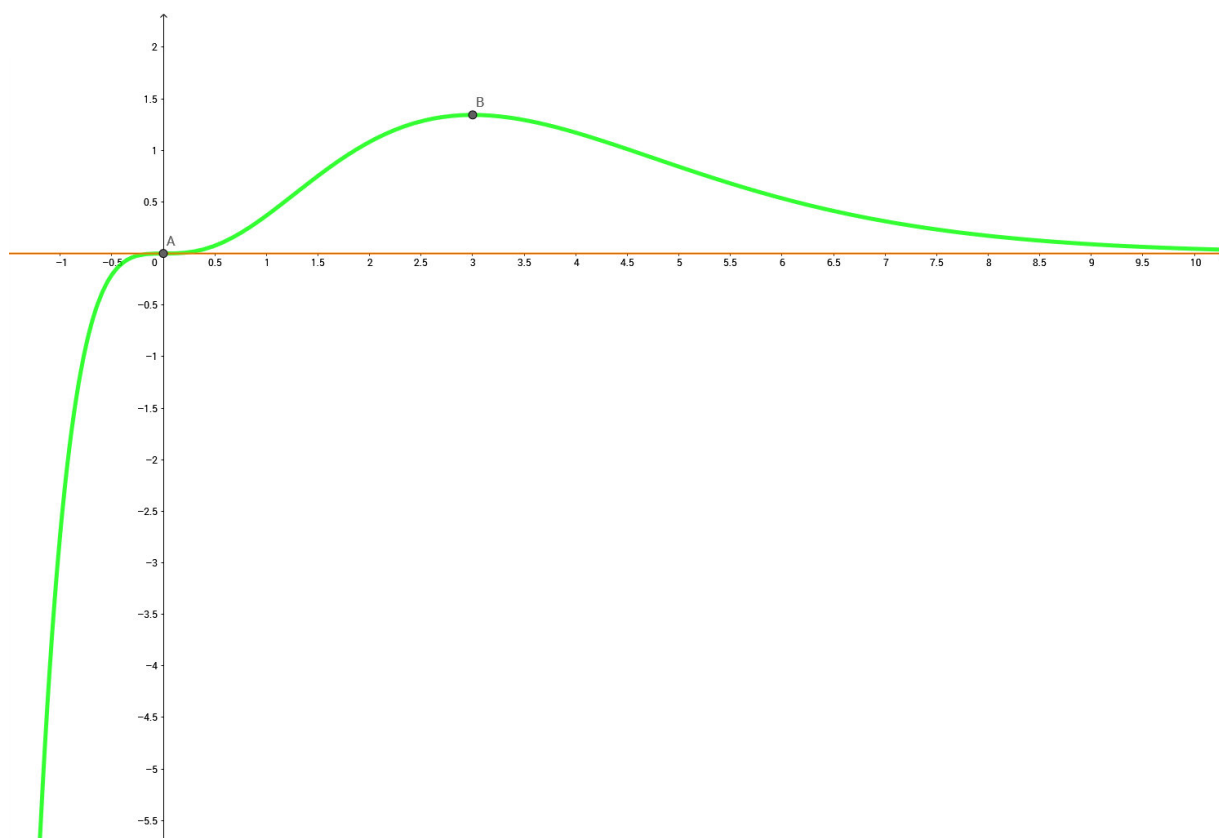
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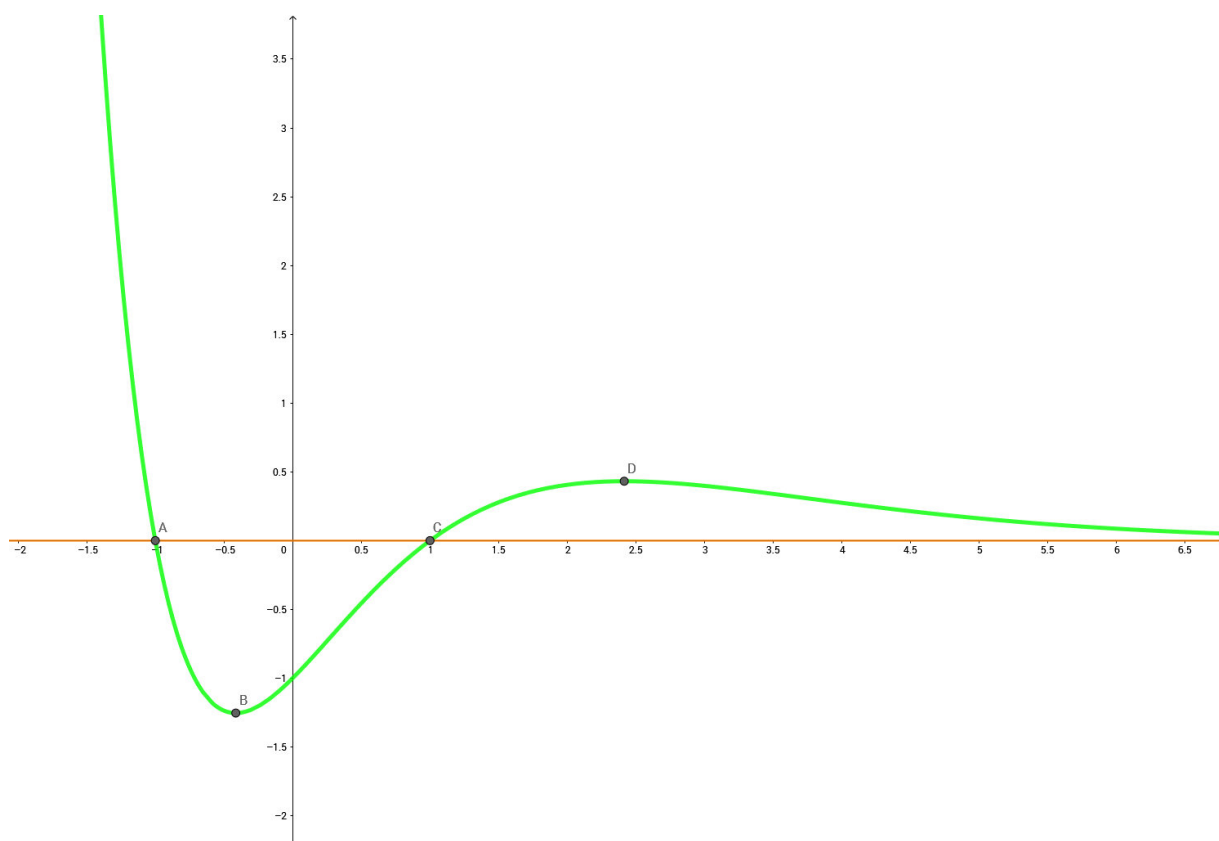
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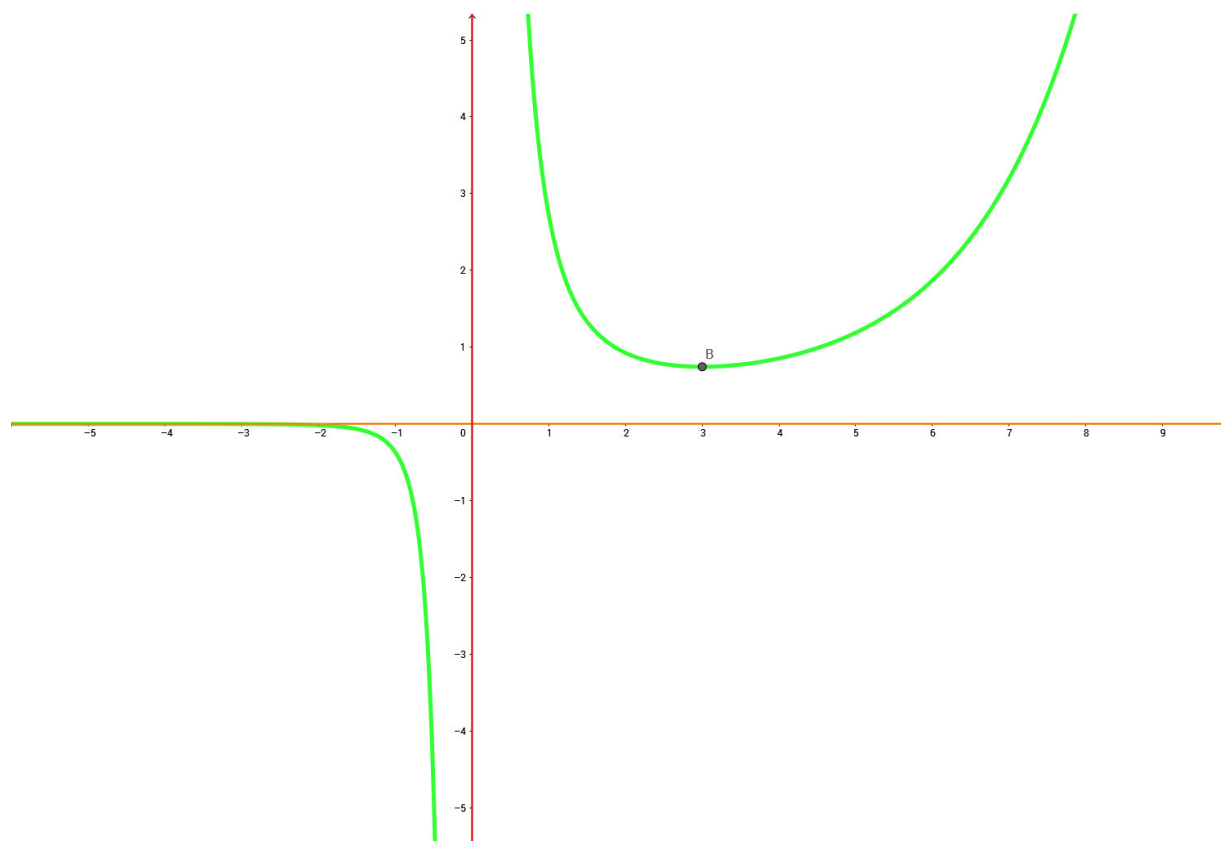
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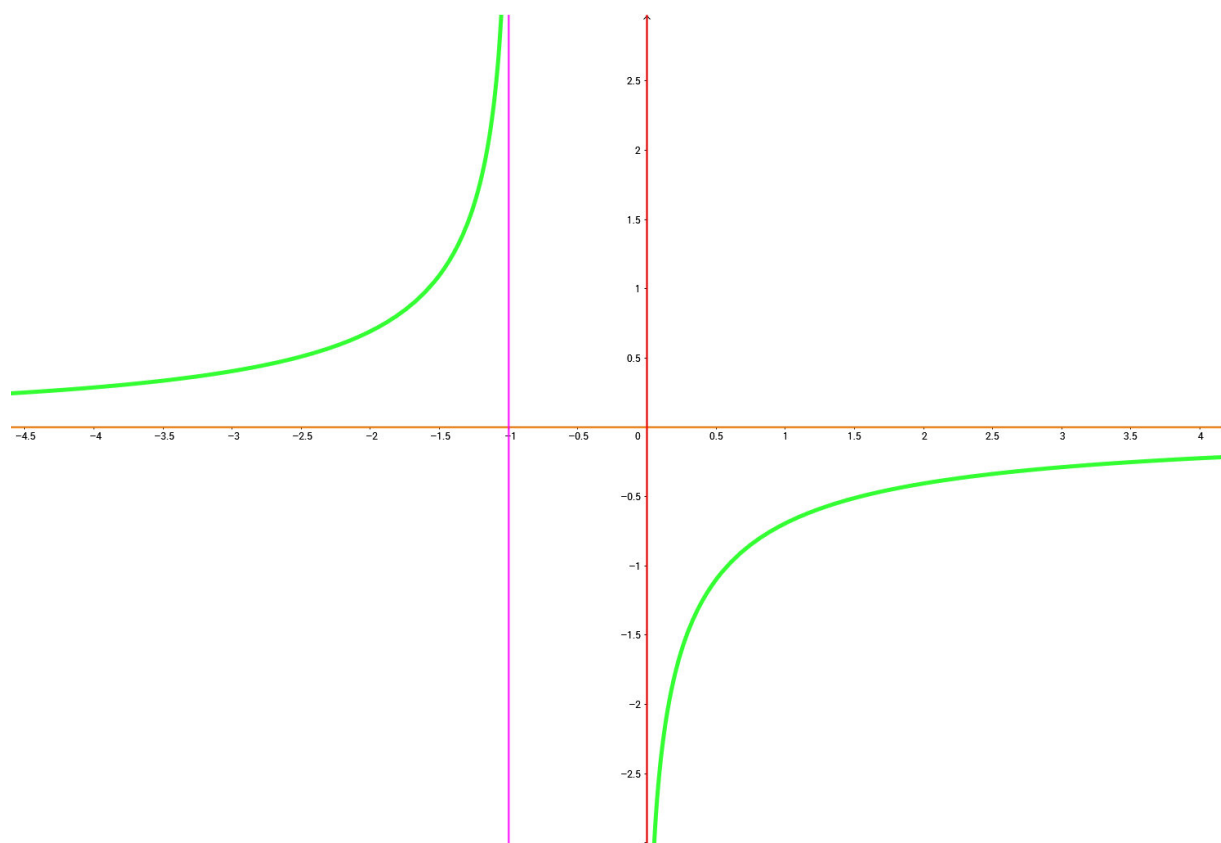
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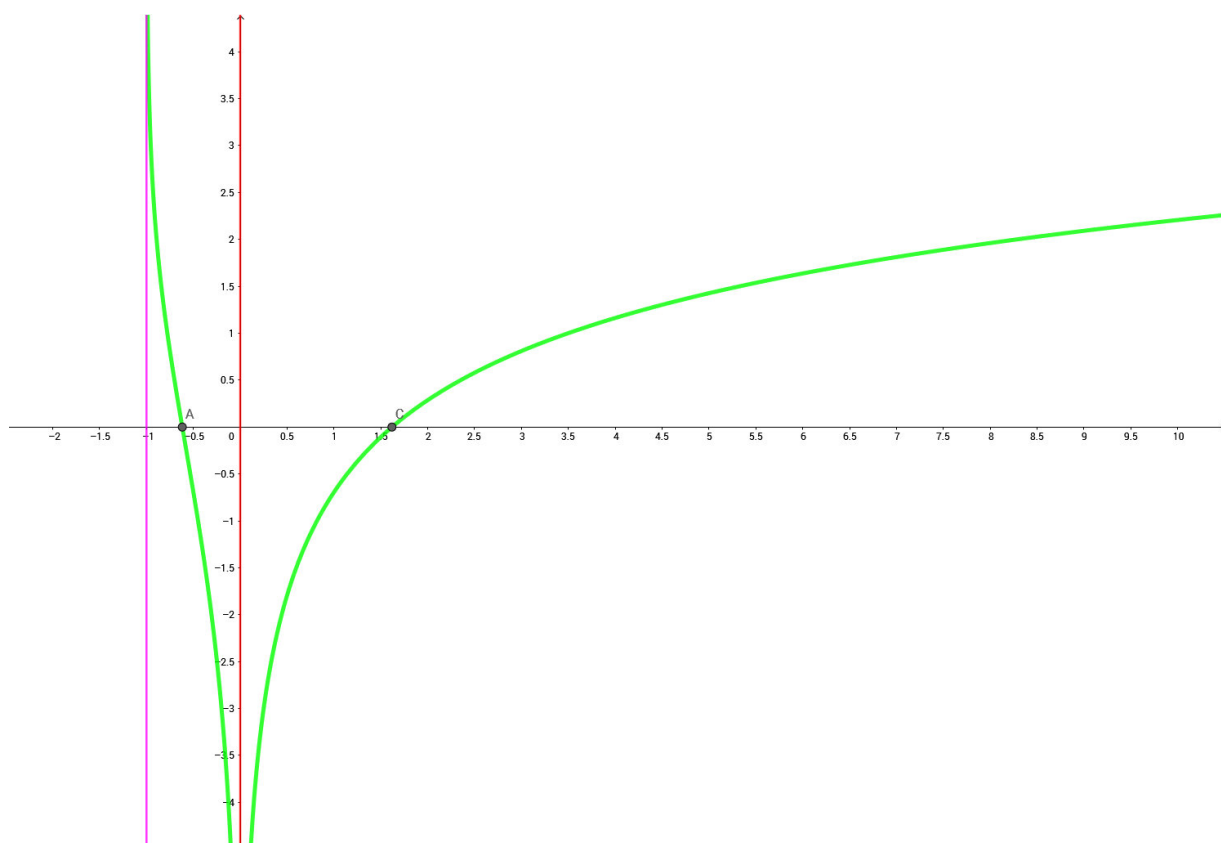
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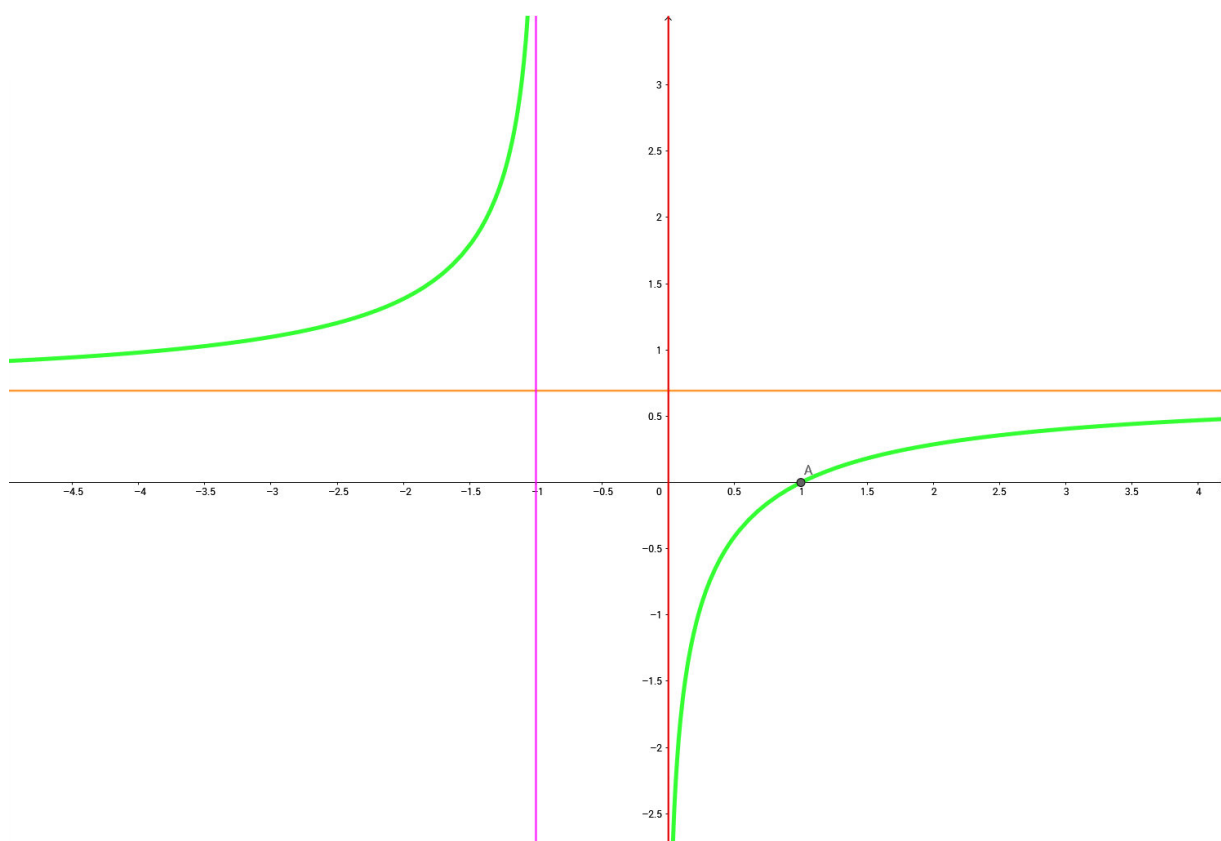
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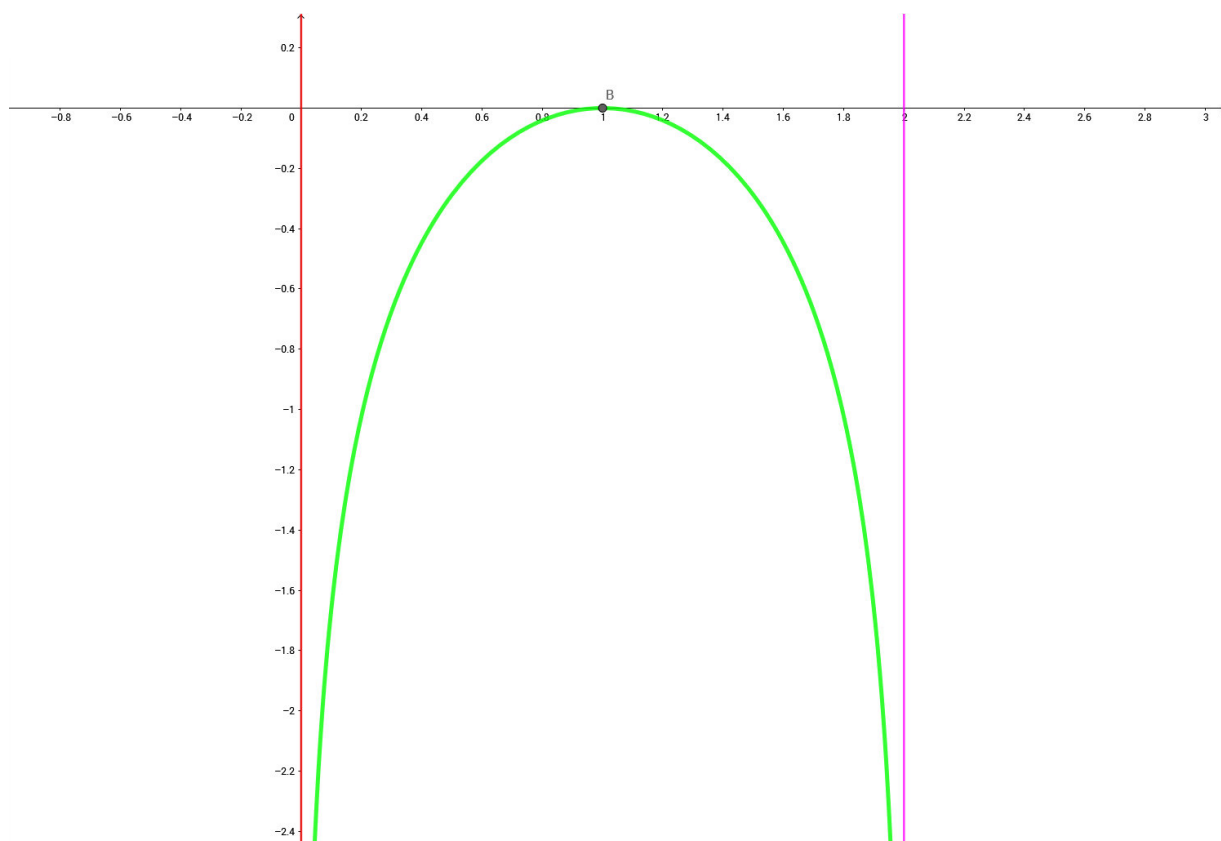
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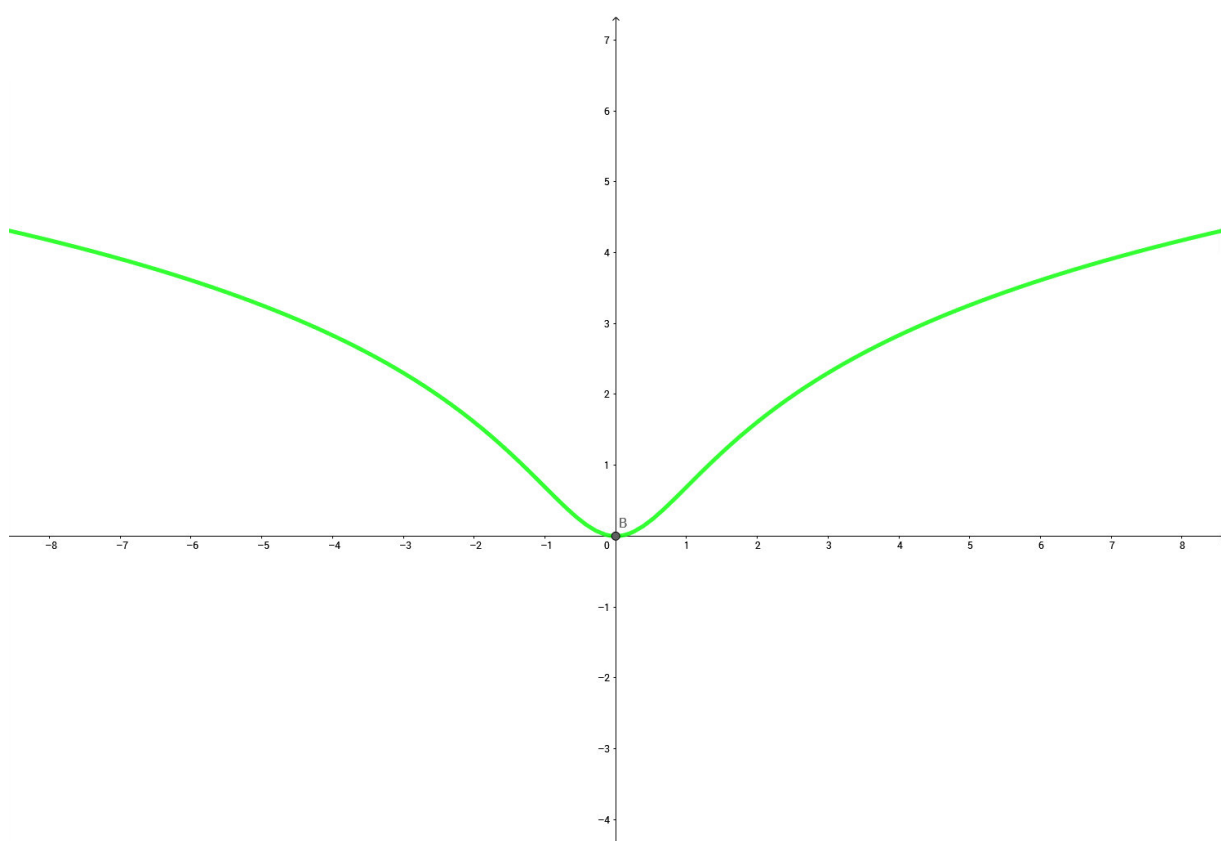
(r)



(s)



(t)



(u)

