$D(f)$
$D(f')$
limites $x \to \pm\infty$
x non définie
dérivées

Étudier les fonctions f, ainsi définies, et construire leur courbe représentative.

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

2. $f(x) = x - 1 + \dfrac{9}{x+1}$.

3. $f(x) = \dfrac{4x^2 + 4x + 5}{4x + 2}$.

4. $f(x) = \dfrac{x^2 + 2x + 2}{x - 1}$.

5. $f(x) = \dfrac{-x^2 - 2x - 1}{x + 3}$.

6. $f(x) = \dfrac{x^2}{|x| + 2}$.

7. $f(x) = x + 2 - \dfrac{1}{x+1}$.

8. $f(x) = x + 3 - \dfrac{1}{2x+1}$.

9. $f(x) = -2x + 1 + \dfrac{2}{x-1}$.

10. $f(x) = |x + 1| + \dfrac{1}{x-1}$.

11. $f(x) = \dfrac{(x-2)^2}{x^2+2}$.

12. $f(x) = \dfrac{x^2 - 4x + 6}{(x-2)^2}$.

13. $f(x) = \dfrac{2x^2 - 3}{x^2 - 1}$.

14. $f(x) = 2 - \dfrac{1}{x+1} + \dfrac{4}{x+2}$.

15. $f(x) = \dfrac{x^2 - 1}{2x^2 - x}$.

16. $f(x) = \dfrac{-3x^2 - 12x}{x^2 - 2x + 1}$.

17. $f(x) = \left|\dfrac{8x}{x^2+1}\right|$.

18. $f(x) = \dfrac{2x+1}{x^2+x}$.

19. $f(x) = x^3 + x^2 + 2x - 4$.

20. $f(x) = -x^3 + 2x^2 - 2x + 1$.

21. $f(x) = x^3 - 3x + 2$.

22. $f(x) = \dfrac{x^3}{3} - \dfrac{5}{2}x^2 + 6x$.

23. $f(x) = \dfrac{1}{3}(x-2)^3$.

24. $f(x) = |x^3 - 6x^2 + 11x - 6|$.

25. $f(x) = x^4 - 16$.

26. $f(x) = x^4 - 5x^2 + 4$.

27. $f(x) = 2x^4 + 3$.

28. $f(x) = -(x-1)^4$.

29. $f(x) = x^4 - 8x^3 + 22x^2 - 24x$.

30. $f(x) = \dfrac{2x^2 + x - 1}{x^2 - x + 1}$.

31. $f(x) = \dfrac{x^2 + 3x - 4}{x^2 - x - 2}$.

32. $f(x) = \dfrac{-3x^2 + 10x - 8}{2(x^2 - 4x + 3)}$.

33. $f(x) = \dfrac{x(3x-4)}{2(x-1)^2}$.

34. $f(x) = |2 - x| - |10 - x - 2x^2|$. $\longrightarrow$

35. $f(x) = \dfrac{-2x(x-3)}{3(x-1)}$.

36. $f(x) = \dfrac{x^2}{2} + \dfrac{1}{x}$.

37. $f(x) = 5x + 3\sqrt{x^2 - 1}$.

38. $f(x) = \dfrac{x^2 + 8x + 12}{\sqrt{x^2 + 4x + 3}}$.

39. $f(x) = x^3 + \dfrac{1}{x}$.

40. $f(x) = x + \dfrac{1}{\sqrt{1-x}}$.

41. $f(x) = x - \dfrac{1}{\sqrt{1-x}}$.

42. $f(x) = \sqrt[3]{x^3 - 3x + 2}$.

43. $f(x) = (x-2)^2(x+3)(x-4)$.

44. $f(x) = \dfrac{(x+1)^3}{(x-1)^2}$.

45. $f(x) = \dfrac{x-1}{(2x-1)^2}$.

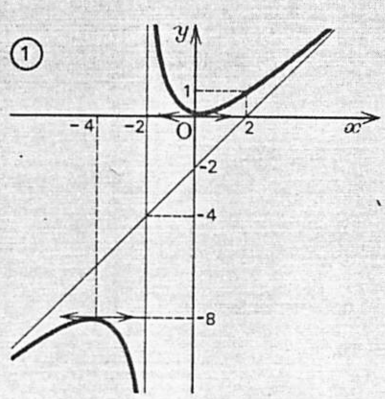
46. $f(x) = \dfrac{x^3 - 1}{x^2}$.

47. $f(x) = x + \sqrt{3x(8-x)}$.

48. $f(x) = (x+1)^2(2-x)^3$.

RÉPONSES

①



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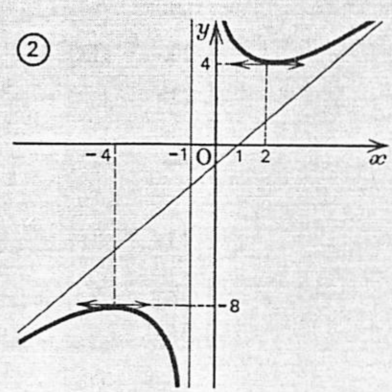

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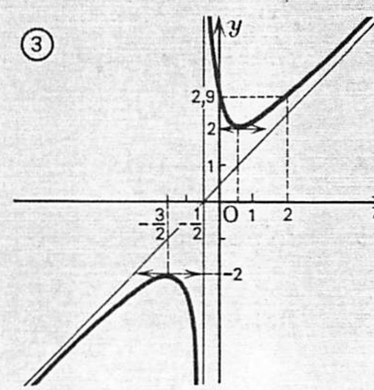

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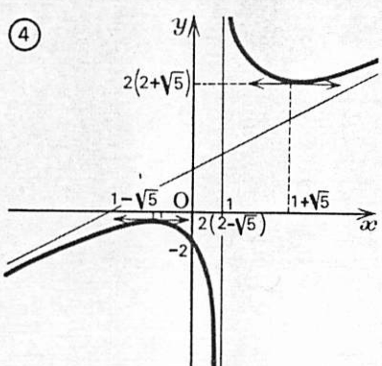

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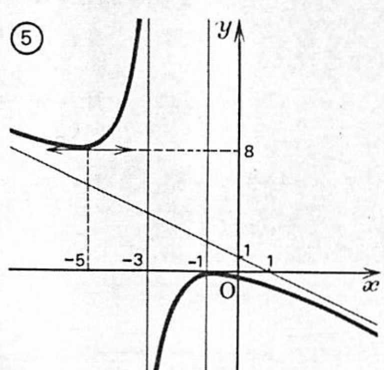

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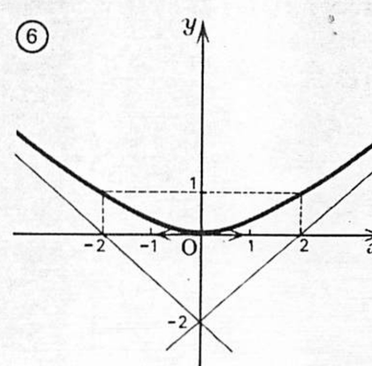

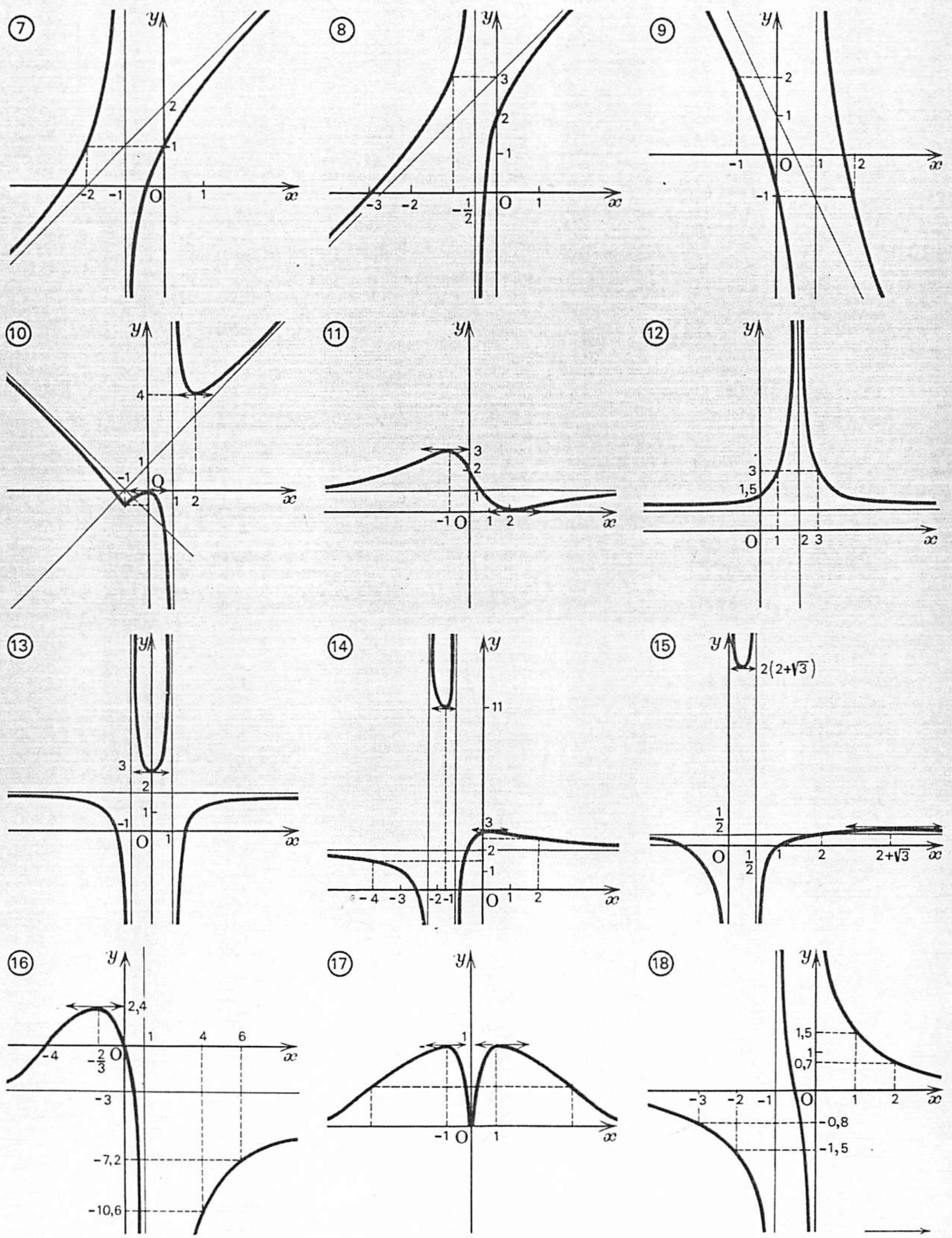
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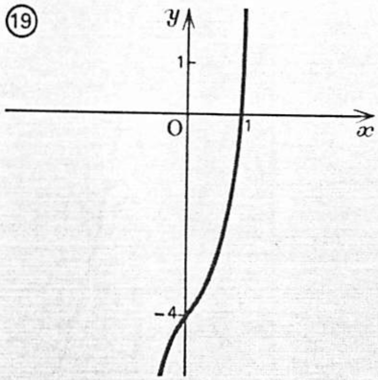

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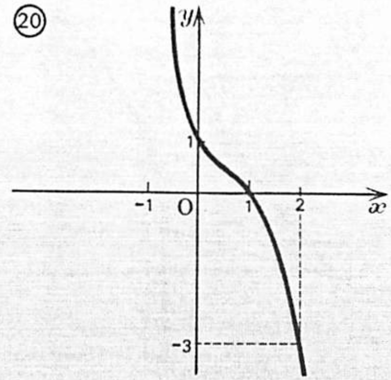

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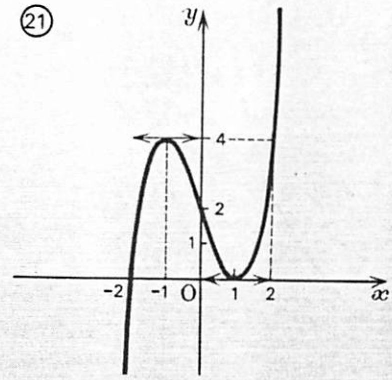

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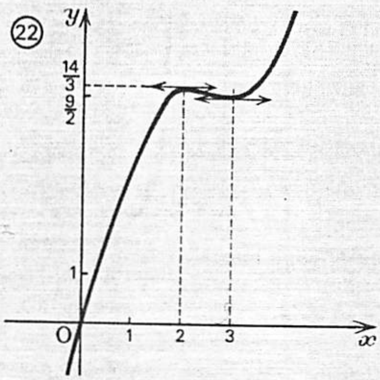

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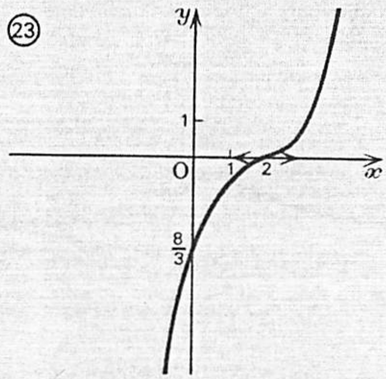

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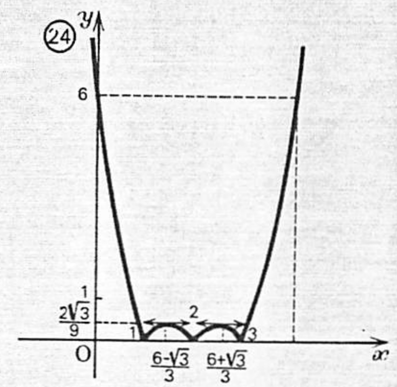

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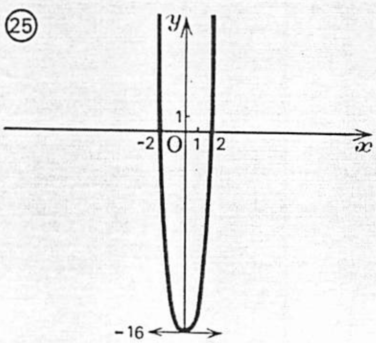

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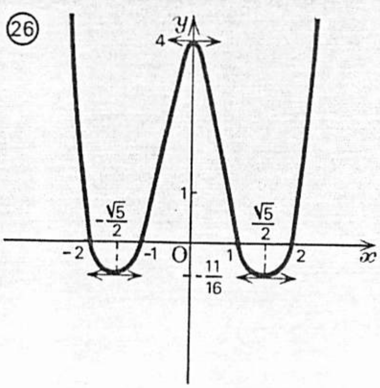

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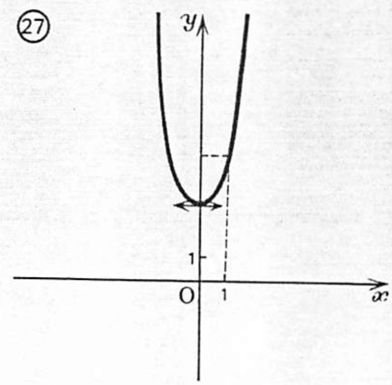

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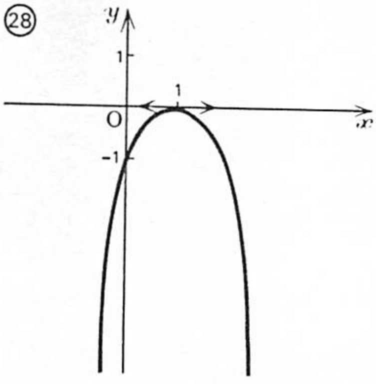

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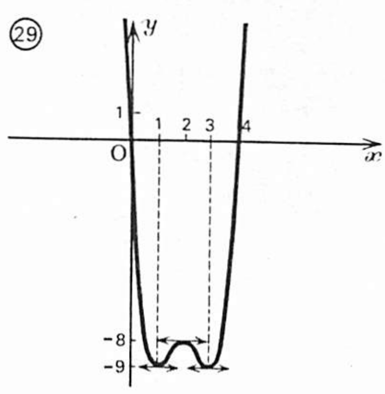

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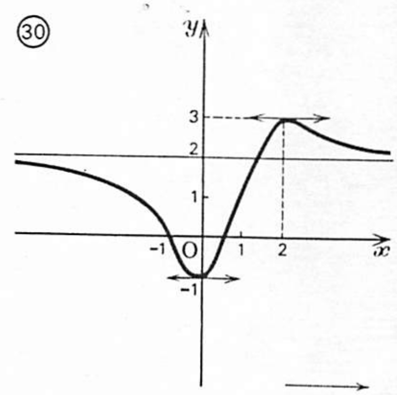

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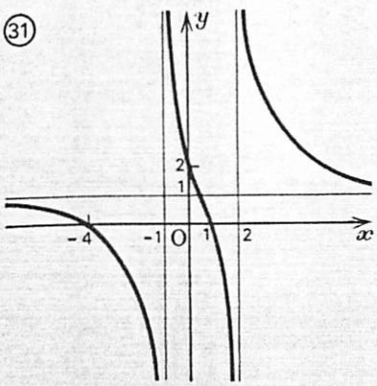

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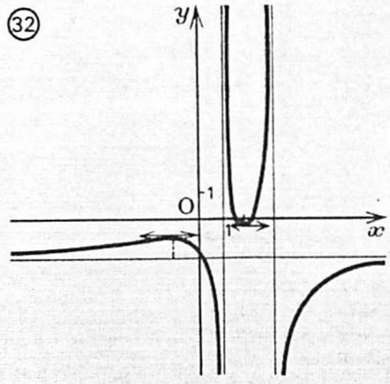

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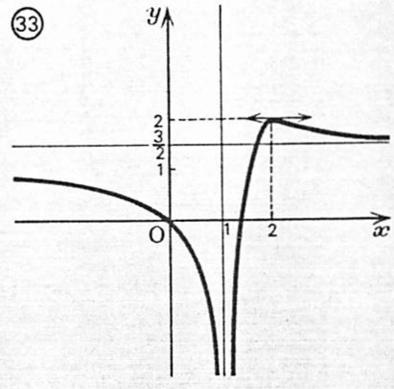

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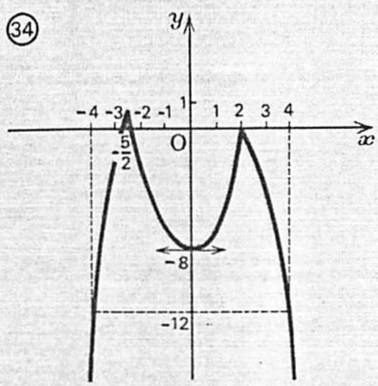

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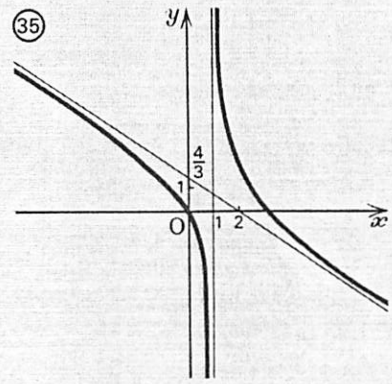

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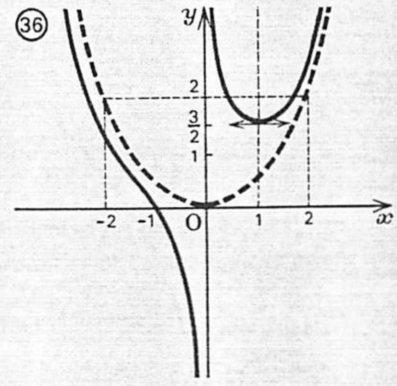

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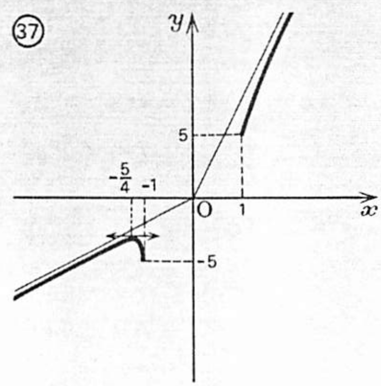

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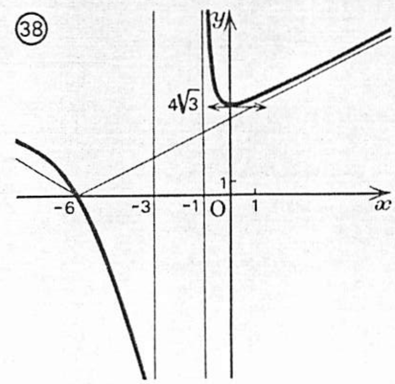

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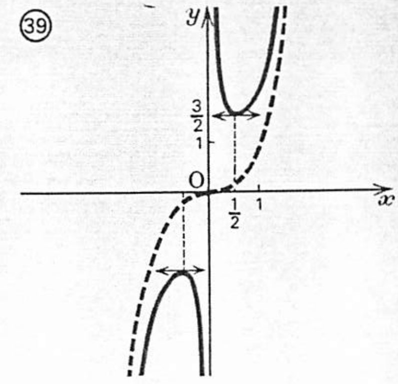

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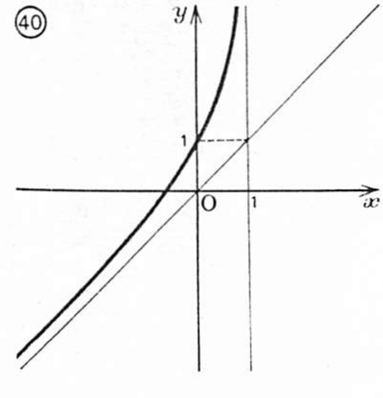

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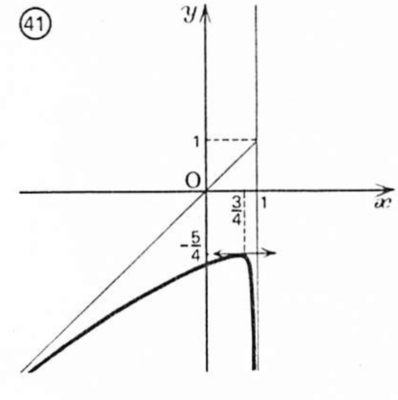

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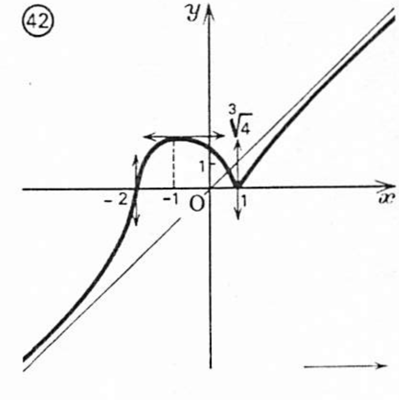

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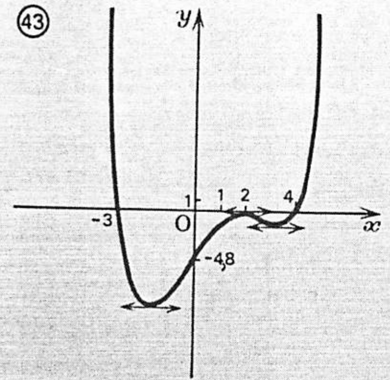

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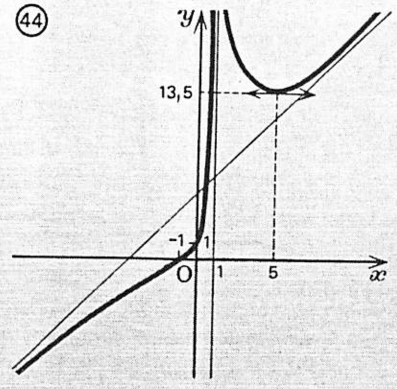

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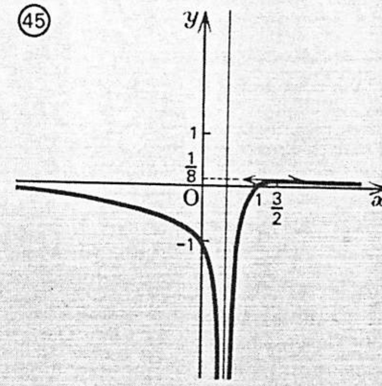

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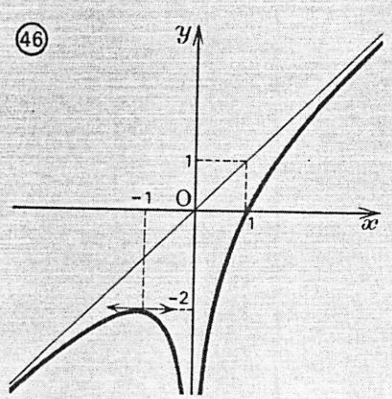

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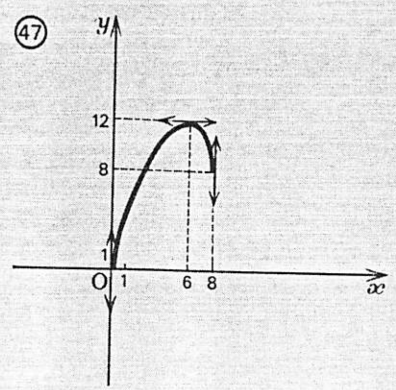

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