Задача № 17.

Найдите линейную форму НОД многочленов f(x) и g(x) наиболее удобным способом.

1. $f(x) = x^4 + 2x^3 - 17x^2 - 12x + 20$; $g(x) = x^4 - 4x^3 + 3x^2 + 2x - 20$;

2. $f(x) = 4x^4 + 2x^2 + 2x + 2$; $g(x) = 3x^4 - 6x^3 + 8x^2 - 5x + 2$;

3. $f(x) = 2x^4 - 14x^3 + 28x^2 - 16x$; $g(x) = 2x^4 - 15x^3 + 34x^2 - 25x + 4$;

4. $f(x) = 4x^4 + 4x^3 - 17x^2 - x + 4$; $g(x) = 3x^4 + 5x^3 - 10x^2 - 8x$;

5. $f(x) = x^4 + x^3 - 13x^2 - 6x + 12$; $g(x) = x^4 - 5x^3 + 3x^2 + 10x - 4$;

6. $f(x) = 2x^4 - 15x^3 + 14x^2 + 40x + 15$; $g(x) = 2x^4 - 11x^3 + 2x^2 - 12x - 9$;

7. $f(x) = 4x^4 + 10x^3 - 3x^2 - 2x - 2$; $g(x) = 2x^4 + 2x^3 - 5x^2 + 10x - 6$;

8. $f(x) = x^4 - 2x^3 + x - 12$; $g(x) = 2x^4 - 5x^3 - 8x^2 + 15x + 12$;

9. $f(x) = 4x^4 + 14x^3 - 15x^2 - 13x + 5$; $g(x) = 2x^4 + 10x^3 + 5x^2 - 11x - 15$;

10. $f(x) = x^4 + 2x^3 + x^2$; $g(x) = x^4 - 3x^3 - 14x^2 - 15x - 5$;

11. $f(x) = x^4 - 3x^3 - 8x^2 + 12x + 16$; $g(x) = 2x^4 - 2x^3 - 24x^2 - 4x + 16$;

12. $f(x) = 3x^4 + 3x^3 - 20x^2 + 17x - 5$; $g(x) = 2x^4 - 16x^2 + 24x - 10$;

13. $f(x) = x^4 - 3x^3 - 2x^2 + 7x - 3$; $g(x) = x^4 + 3x^3 - x^2 - 4x + 2$;

14. $f(x) = 3x^4 - 17x^3 - 2x^2 - 5x - 15$; $g(x) = 2x^4 - 7x^3 - 29x^2 + 5x + 20$;

15. $f(x) = x^4 - x^3 + x^2 + 3x$; $g(x) = x^4 - 5x^3 + 6x^2 - 3x - 9$;

16. $f(x) = x^3 - 4x^2 + x + 6$; $g(x) = x^3 + 2x^2 + 2x + 1$;

17. $f(x) = x^5 + 2x^4 + 4x^3 + 10x^2 + 16x + 12$; $g(x) = x^4 + 2x^3 + 3x^2 + 2x + 2$;

18. $f(x) = x^3 - x^2 - 4x - 6$; $g(x) = x^3 + x^2 - 10x - 6$;

19. $f(x) = x^4 + x^3 - 3x^2 - 6x - 3$; $g(x) = x^3 + 2x^2 + 2x + 1$;

20. $f(x) = x^6 + 6x^5 - 4x^4 + 4x^3 + 12x^2 - 8x + 4$; $g(x) = x^5 - x^4 - x^3 + 2x^2 - 2x - 2$;

21. $f(x) = x^4 + 6x^3 + 17x^2 + 24x + 12$; $g(x) = x^3 - 2x^2 - 13x - 10$;

22. $f(x) = x^5 + x^4 + 3x^3 + 4x^2 + 4x + 2$; $g(x) = x^5 + 2x^4 + 3x^3 + 6x^2 + 6x + 2$;

23. $f(x) = x^6 + 6x^5 + 2x^3 + 3x^2 + 6x + 1$; $g(x) = x^5 + 6x^4 + 4x^2 + 4x^2 + 4x + 6$;

24. $f(x) = x^4 + 2x^3 - x^2 - 4x - 2$; $g(x) = x^4 + x^3 - x^2 - 2x - 2$;

25. $f(x) = x^5 + 3x^4 + x^3 + x^2 + 3x + 1$; $g(x) = x^4 + 2x^3 + x + 2$;

26. $f(x) = 4x^4 - 2x^3 - 16x^2 + 5x + 9$; $g(x) = 2x^3 - x^2 - 5x + 4$;

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

28. $f(x) = x^4 + x^3 + 2x^2 + x + 1$; $g(x) = x^3 - 2x^2 + x - 2$;

29. $f(x) = x^3 - 4x^2 + x + 1$; $g(x) = x^3 + 2x^2 + 2x + 1$;

30. $f(x) = x^5 + 2x^4 + 4x^3 + 10x^2 + 16x + 12$; $g(x) = x^4 + 2x^3 + 3x^2 + 2x + 2$;

31. $f(x) = x^6 + x^5 - 3x^4 + 2x^3 + 4x - 2$; $g(x) = x^5 + 3x^4 + x^3 + 6x^2 + 4x + 6$;

32. $f(x) = 2x^4 - x^3 - 3x^2 - 7x - 12$; $g(x) = 2x^4 - x^3 - 9x^2 - x + 6$;

33. $f(x) = x^5 - x^3 + 2x^2 - 2x + 2$; $g(x) = x^4 + 2x^3 + 7x^2 + 2x + 6$;

34. $f(x) = 3x^4 + 14x^3 + 10x^2 - 12x - 8$; $g(x) = 4x^4 + 18x^3 + 12x^2 - 12x - 8$;

35. $f(x) = 2x^4 - 4x^3 - 6x^2 - 8x - 20$; $g(x) = 4x^4 - 8x^3 - 19x^2 - 2x - 5$;

36. $f(x) = 4x^4 + 16x^3 + 5x^2 + 4x + 1$; $g(x) = 3x^4 + 9x^3 - 9x^2 - 3x$.