



แบบฝึกหัดการคูณพหุนามกำลังสี่

จงหาผลคูณของพหุนามต่อไปนี้โดยใช้ตารางโดยยึดหลักการคูณเวทคณิตแบบแนวตั้งและแนวไขว้

1. $(4x^4 - 20x^3 + 25x^2 - 2x + 5)(5x^4 - 9x^3 + 7x^2 - 8x + 4)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				4	-20	25	-2	5
				5	-9	7	-8	4

2. $(11x^4 - 8x^3 + 3x^2 - 9x + 1)(10x^4 - 7x^3 + 17x^2 - 12x + 9)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				11	-8	3	-9	1
				10	-7	17	-12	9

3. $(9x^4 - 5x^3 + 7x^2 + 8)(6x^4 - 4x^2 - 5x + 3)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				9	-5	7	0	-8
				6	0	-4	-5	3

4. $(4x^4 + 7x^3 - 9x^2 + 5x - 15)(6x^4 + 7x^3 - 3x^2 + 8x - 2)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				4	7	-9	5	-15
				6	7	-3	8	-2

5. $(9x^4 + 14x^3 - 6x^2 + 12x - 5)(8x^4 - 7x^3 + 13x^2 - 20x + 8)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				9	14	-6	12	-5
				8	-7	13	-20	8





6. $(8x^4 + 6x^3 - 5x^2 + 7x - 2)(6x^4 - 7x^3 + 5x^2 - 8x + 4)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				8	6	-5	7	-2
				6	-7	5	-8	4

7. $(13x^4 - 8x^3 + 2x^2 - 9x + 10)(4x^4 - 5x^3 + 8x^2 - 6x + 1)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				13	-8	2	-9	10
				4	-5	8	-6	1

8. $(6x^4 - 5x^3 + 4x^2 - 3x + 8)(7x^4 + 6x^3 - 12x^2 + 27x - 9)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				6	-5	4	-3	8
				7	6	-12	27	-9

9. $(5x^4 - 16x^3 + 7x^2 - 5x + 17)(8x^4 - 7x^3 + 9x^2 - 12x + 6)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				5	-16	7	-5	17
				8	-7	9	-12	6

10. $(7x^4 - 5x^3 - 9x^2 + 4x - 13)(9x^4 - 13x^3 + 19x^2 + 14x - 2)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				7	-5	-9	4	-13
				9	-13	19	14	-2





11. $(6x^4 - 9x^3 + 2x + 1)(4x^3 + 7x^2 - 5)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				6	-9	0	2	1
				1	4	7	0	-5

12. $(18x^4 - 14x^2 + 8x - 1)(17x^4 - 15x^3 + 6x - 5)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				18	0	-14	8	-1
				17	15	0	6	-5

13. $(19x^4 - 6x^3 + 7x^2 - 1)(12x^3 - 6x^2 + 9x)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				19	-9	7	0	-1
				1	12	-6	9	0

14. $(5x^4 - 18x^3 + 15x^2 + 7x - 9)(18x^3 - 16x^2 + 8)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				5	-18	15	7	-9
				1	18	-16	0	8

15. $(18x^4 + 5x^3 - 8x + 2)(9x^3 + 2x - 8)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				18	5	0	-8	2
				1	9	0	2	-8





16. $(5x^4 - 8x^2 + 9)(7x^3 - 3x^2 + 6)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				5	0	-8	0	9
				1	7	-3	0	6

17. $(17x^4 - 18x^3 + 5x^2 - 1)(15x^4 + 5x - 2)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				17	-18	5	0	-1
				15	0	0	5	-2

18. $(19x^4 - 8x^2 + 6x)(14x^3 - 9x^2 + 5)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				19	0	-8	6	0
				1	14	-9	0	5

19. $(17x^4 - 6x^3 + 2x - 6)(17x^3 - 8x^2 + 7)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				17	-6	0	2	-6
				1	17	-8	0	7

20. $(19x^4 - 6x^3 + 3x^2 - 4x + 12)(15x^4 - 9x^2 + 1x - 7)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				19	-6	3	-4	12
				15	0	-9	1	-7





21. $(17x^4 - 24x^3 + 7x^2 - 11x + 7)(9x^4 + 15x^3 - 6x^2 + 18x - 4)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				17	-24	7	-11	7
				9	15	-6	18	-4

22. $(25x^4 - 6x^3 + 17x^2 - 5x + 19)(24x^4 - 5x^3 - 6x^2 + 28x - 4)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				25	-6	17	-5	19
				24	-5	-6	28	-4

23. $(14x^4 - 11x^3 + 5x^2 - 7x + 2)(15x^4 - 3x^3 + 26x^2 - 5x + 16)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				14	-11	5	-7	2
				15	-3	26	-5	16

24. $(22x^4 - 8x^3 + 15x^2 - 4x + 3)(16x^4 - 5x^3 - 28x^2 + 4x - 5)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				22	-8	15	-4	3
				16	-5	-28	4	-5

25. $(14x^4 - 2x^3 + 5x^2 - 13x + 19)(23x^4 - 22x^3 + 17x^2 - 6x + 5)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				14	-2	5	-13	19
				23	-22	17	-6	5





26. $(23x^4 - 44x^3 + 5x^2 - 12x - 8)(22x^4 - 9x^3 + 3x^2 - 2x + 6)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				23	-44	5	-12	-8
				22	-9	3	-2	6

27. $(16x^4 + 8x^3 - 4x^2 + 5x - 22)(18x^4 + 7x^3 - 3x^2 + 13x - 24)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				16	8	-4	5	-22
				18	7	3	13	-24

28. $(25x^4 + 12x^3 - 23x^2 - 21x + 3)(24x^4 + 16x^3 - 11x^2 + 8x - 4)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				25	12	-23	-21	3
				24	16	-11	8	-4

29. $(15x^4 + 24x^3 + 12x^2 - 27x + 13)(18x^4 - 4x^3 + 6x^2 - 17x + 10)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				15	24	12	-27	13
				18	-4	6	-17	10

30. $(12x^4 + 23x^3 - 11x^2 + 5x - 3)(6x^4 - 8x^3 + 17x^2 - 3x + 5)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				12	23	-11	5	-3
				6	-8	17	-3	5





31. $(27x^4 - 17x^3 + 16x + 1)(13x^3 - 19x^2 - 6x)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				27	-17	0	16	1
				1	13	19	-6	0

32. $(29x^4 - 10x^2 + 15x - 7)(25x^3 - 17x^2 + 21x + 8)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				29	0	-10	15	-7
				1	25	-17	21	8

33. $(15x^4 + 43x^3 - 8x^2 + 4x - 1)(5x^4 - 29x^3 - 6x^2 - 2x + 1)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				15	43	-8	4	-1
				5	-29	-6	-2	1

34. $(43x^4 + 7x^3 - 29x^2 - 5x + 4)(7x^3 - 8x^2 + 16x - 2)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				43	7	-29	-5	4
				1	7	-8	16	-2

35. $(22x^4 - 51x^3 + 17x^2 - 12x + 7)(31x^3 - 6x^2 + 3x - 9)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				22	-51	17	-12	7
				1	31	-6	3	-9





36. $(33x^4 - 16x^3 + 5x^2 - 7x - 4)(12x^3 - 9x^2 + 14x - 3)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				33	-16	5	-7	-4
				1	12	-9	14	-3

37. $(42x^4 - 6x^3 + 17x^2 + 4x - 1)(19x^3 + 5x^2 - 9x + 3)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				42	-6	17	4	-1
				1	19	5	-9	3

38. $(6x^4 + 18x^3 - 9x - 7)(19x^3 + 13x^2 - 2x + 5)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				6	18	0	-9	-7
				1	19	13	-2	5

39. $(41x^4 - 5x^3 + 8x^2 - 2x + 32)(22x^3 - 16x^2 + 12x - 6)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				41	-5	8	-2	32
				1	22	-16	12	-6

40. $(14x^4 - 16x^3 + 7x^2 - 1)(18x^3 - 6x^2 + 19x + 4)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				14	-16	7	0	-1
				18	0	-6	19	4





41. $(5x^4 - 12x^3 + 4x^2 - 6x + 9)(12x^4 - 15x^3 + 6x^2 - 13x + 6)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				5	-12	4	-6	9
				12	-15	6	-13	6

42. $(14x^4 - 13x^3 + 12x^2 - 11x + 10)(15x^4 - 16x^3 + 17x^2 - 18x + 19)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				14	-13	12	-11	10
				15	-16	17	-18	19

43. $(21x^4 + 22x^3 + 23x^2 - 24x + 25)(6x^4 + 7x^3 + 8x^2 - 9x + 3)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				21	22	23	-24	25
				6	7	8	-9	3

44. $(8x^4 - 6x^3 + 5x^2 - 7x + 9)(3x^4 - 5x^3 + 2x^2 + 11x - 8)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				8	-6	5	-7	9
				3	-5	2	11	-8

45. $(17x^4 - 18x^3 + 19x^2 + 20x - 21)(12x^4 - 29x^3 + 11x^2 - 19x - 13)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				17	-18	19	20	-21
				12	29	11	-19	-13





46. $(18x^4 - 9x^3 - 5x^2 + 2x - 17)(17x^4 - 4x^3 + 16x^2 - 25x + 11)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				18	-9	-5	2	-17
				17	-4	16	-25	11

47. $(8x^4 + 5x^3 - 23x^2 + 21x - 14)(9x^4 - 25x^3 + 13x^2 + 12x - 23)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				8	5	-23	21	-14
				9	-25	13	12	-23

48. $(6x^4 + 4x^3 - 3x^2 - 21x + 11)(7x^4 + 3x^3 + 6x^2 - 3x + 2)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				6	4	-3	-21	11
				7	3	6	-3	2

49. $(5x^4 - 7x^3 + 6x^2 - 9x + 7)(6x^4 + 7x^3 + 3x^2 - 4x + 5)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				5	-7	6	-9	7
				6	7	3	-4	5

50. $(4x^4 - 6x^3 + 9x^2 - 3x + 7)(4x^4 - 7x^3 + 4x^2 + 5x - 12)$

x^8	x^7	x^6	x^5	x^4	x^3	x^2	x^1	x^0
				4	-6	9	-3	7
				4	-7	4	5	-12

