

1. (Epolynom12.tex)  $A \wedge B = X - 1, U = 1, V = -X.$

2. (Eexo285.tex) non

3. (Epolynom30.tex)  $S_n + pS_{n+2} + qS_{n+3} = 0$

4. (Epolynom6.tex) 10

5. (Epolynom19.tex)

$$Q = X - 1 \quad R = X + 1;$$

6. (Epolynom43.tex)

$$\tilde{P}(a) + \tilde{P}'(a)(X - a)$$

7. (Epolynom33.tex)

$$X^2 + X + 2$$

8. (Epolynom31.tex)

$$2\sigma_1^2 - 2\sigma_2$$

9. (Epolynom42.tex)  $\sigma_1\sigma_2 - \sigma_3$  (on peut utiliser le polynôme dont  $x, y$  et  $z$  sont racines).

10. (Epolynom39.tex)

$$\sigma'_1 = 2\sigma_1, \quad \sigma'_2 = \sigma_2 + \sigma_1^2, \quad \sigma'_3 = \sigma_1\sigma_2 - \sigma_3$$

11. (Eexo74.tex)

$$\sigma_1^2 - 2\sigma_2$$

12. (Epolynom34.tex) 5

13. (Epolynom24.tex)  $-3$

14. (Epolynom13.tex)  $A \wedge B = X + 1, U = 1, V = -X.$

15. (Eexo286.tex) oui

16. (Epolynom32.tex) La multiplicité de 1 est 2.

17. (Epolynom9.tex) 18

18. (Epolynom7.tex) 8

19. (Epolynom16.tex) non

20. (Eexo287.tex)

$$(X^2 + \sqrt{2}X + 1)(X^2 - \sqrt{2}X + 1)$$

21. (Eexo288.tex)

$$(X^2 + 1)(X - 1)(X + 1)$$

22. (Epolynom37.tex) solutions  $-1, i, 2i.$

23. (Epolynom21.tex)

$$Q = X + 1 \quad R = X^2 + 1;$$

24. (Epolynom15.tex)  $A \wedge B = 1, U = \frac{1}{12}X + \frac{1}{4}, V = -\frac{1}{12}X - \frac{1}{6}.$

25. (Epolynom41.tex) Quotient :  $X + 3.$

26. (Epolynom23.tex)

$$\frac{1}{2}e^\theta, \frac{1}{2}e^{-\theta}$$

27. (Epolynom2.tex) 6

28. (Epolynom22.tex)

$$\frac{1}{2}e^{i\theta}, \frac{1}{2}e^{-i\theta}$$

29. (Epolynom3.tex)  $-2$

30. (Epolynom28.tex) quotient :  $X + 2.$  reste :  $-5.$

31. (Epolynom11.tex)  $\sigma_1^3 - 3\sigma_1\sigma_2 + 3\sigma_3$

32. (Eexo289.tex)

$$(X^2 + X + 1)(X^2 - X + 1)$$

33. (Epolynom8.tex)  $+8$

34. (Epolynom18.tex)

$$Q = X + 1 \quad R = X + 1$$

35. (Epolynom38.tex)

$$\sigma'_1 = \sigma_2, \quad \sigma'_2 = \sigma_1\sigma_3, \quad \sigma'_3 = \sigma_3^2$$

36. (Epolynom20.tex)

$$Q = X + 1 \quad R = X - 1;$$

37. (Epolynom1.tex) 3

38. (Epolynom29.tex)  $S_{n+3} + pS_{n+1} + qS_n = 0$

39. (Eexo290.tex)

$$(X^2 + \sqrt{3}X + 1)(X^2 - \sqrt{3}X + 1)$$

40. (Eexo141.tex)

$$(X^2 - 2\cos \alpha X + 1)(X^2 + 2\cos \alpha X + 1)$$

41. (Epolynom35.tex) somme des inverses des racines 0

42. (Epolynom40.tex) 1 est une racine de multiplicité 3.

43. (Epolynom25.tex) quotient : 1. reste :  $X^2 + X - 3.$

44. (Epolynom26.tex)

$$x^7 = -x^3 + x + 1$$

45. (Epolynom5.tex) 14

46. (Epolynom36.tex) Quotient  $X + 1,$  reste  $3X^2 + 2X + 1.$

47. (Epolynom17.tex)

$$\frac{2\pi}{9}, \frac{8\pi}{9}, \frac{14\pi}{9}, \frac{4\pi}{9}, \frac{10\pi}{9}, \frac{16\pi}{9}$$

48. (Epolynom4.tex)  $-3$

49. (Epolynom27.tex)

$$U = X + 1, \quad V = -X^2 - X + 1$$

50. (Epolynom14.tex)  $A \wedge B = X - 2, U = \frac{1}{2}, V = -\frac{1}{2}.$

51. (Eexo142.tex)

$$(X^2 - 2\sin \alpha X + 1)(X^2 + 2\sin \alpha X + 1)$$

52. (Epolynom10.tex)  $\sigma_1^2 - 2\sigma_2$