

RECAPITULARE BACALAUREAT

FISA 3 – ECUATII

1. $3(x-1) + 2 = (x+1) \cdot 3 - 4x$
2. $\frac{x+1}{2} = \frac{2x+2}{3}$
3. $\frac{2x-3}{x+1} = \frac{7}{6}$
4. $\frac{x+1}{2-x} = \frac{-12}{x}$
5. a) $x^2 + x - 6 = 0$
b) $x^2 + x - 6 \geq 0$
c) $x^2 + x - 6 < 0$
6. a) $-x^2 + 5x - 4 = 0$
b) $-x^2 + 5x - 4 \leq 0$
c) $-x^2 + 5x - 4 > 0$
7. a) $3 + x^2 - 7 = 0$
b) $3 + x^2 - 7 < 0$
c) $3 + x^2 - 7 > 0$
8. $\sqrt{x+1} = 5$
9. $\sqrt{2x+1} = 3$
10. $\sqrt{1-x} = 15$
11. $\sqrt{x^2 - 3x + 1} = x$
12. $\sqrt{1 + 5x + x^2} = x$
13. $\sqrt{x-1} = \sqrt{x^2 - x - 2}$
14. $\sqrt{x^2 + 2x + 3} = 5$
15. $\sqrt{x-1} = \sqrt{x^2 - x - 2}$
16. $\sqrt[3]{1-x} = 1$
17. $\sqrt[3]{1-2x} = -3$
18. $\sqrt[3]{x^3 + x + 1} = x$
19. $\sqrt{x^2 + 2x - 3} = 2\sqrt{x}$
20. $\sqrt{x^2 + 2x - 3} = x - 2$
21. $\sqrt{x^2 - 4} = 1 + x$
22. $\sqrt{x^2 - 4} + \sqrt{x-2} = 0$
23. $\sqrt[3]{x+2} - 2 = 0$
24. $1 + \sqrt{x-2} = 3$
25. $\frac{x+3}{1-x} \geq 0$
26. $\frac{x+3}{x^2+1} \geq 0$
27. $\frac{x-3}{x^2+1} < 1$
28. $3^x = 81$
29. $3^{x+1} = 9$
30. $3^{x^2-1} = 27$
31. $4^{x-1} = \frac{1}{4}$
32. $2^{x+1} = \frac{1}{4}$
33. $\frac{1}{3^x} = 9$

$$34. \frac{1}{2^x} = \frac{4^x}{8}$$

$$35. 6^{x-3} = 6^{2-x}$$

$$36. 36^{x+2} = 6^{x^2+5}$$

$$37. 8^{x-1} = 2^{x+1}$$

$$38. 9^{1+x} = 27^{2x-1}$$

$$39. 2^x + 2^{x+1} = 24$$

$$40. 2^{x+2} - 2^{x+1} + 2^x = 24$$

$$41. 3^{x+1} + 3^{x+3} = 84$$

$$42. 2^{x-1} + 2^x = 12$$

$$43. 3^x - 3^{x-2} = 24$$

$$44. 5^{x+1} + 5^{x-1} = 130$$

$$45. 49^x + 8 \cdot 7^x + 7 = 0$$

$$46. 9^x + 2 \cdot 3^x - 3 = 0$$

$$47. 4^x - 5 \cdot 2^x + 4 = 0$$

$$48. \log_2(x-1) = \log_2 3$$

$$49. \log_3(x^2 - x) = \log_3 12$$

$$50. \log_2(2x-1) = 3$$

$$51. \log_3(4-2x) = 2$$

$$52. \log_3(5x+4) = 2$$

$$53. \log_7(3^{x+1} - 2) = 0$$

$$54. \log_3(x^2 - 4x + 4) = 3$$

$$55. \log_2(x+2) + \log_2 x = 3$$