Исследовать на экстремум следующие функции

1. $z = y\sqrt{x} - 2y^2 - x + 14$
2. $z = 2x^3 - 8y^3 - 6xy + 5$
3. $z = 2 + 15x - 2x^2 - xy - 2y^2$
4. $z = 5 + 6x - x^2 - xy - 2y^2$
5. $z = x^3 + 8y^2 - 6xy - 39x + 18y + 20$
6. $z = 2x^3 + 2y^3 - 6xy + 5$
7. $z = 3x^3 + 3y^3 - 9xy + 10$
8. $z = 7x^2 + xy + y^2 + x - y + 1$
9. $z = 4(x - y) - x^2 - y^2$
10. $z = 6(x - y) - 3x^2 - 3y^2$
11. $z = 8x^2 + y^2 + 2xy - 6x - 9y$
12. $z = 3(x - 2)^2 + 2y^2 - 10$
13. $z = (x - 5)^2 + y^2 + 1$
14. $z = 2x^3 + 2y^3 - 6xy$
15. $z = -2x^2 - y^2 - 2xy$
16. $z = x\sqrt{y} - 2x^2 - y + 6x + 3$
17. $z = 2xy - 5x^2 - 3y^2 + 5$
18. $z = 3xy(12 - x - y)$
19. $z = 2xy - x^2 - y^2 + 9$
20. $z = 20xy - 3x^2 - 2y^2 + 10$
21. $z = 3(x - 1)^2 + 2y^2$
22. $z = 2x^2 - 3y^3 - 3xy + 7$
23. $z = 2(x - y) - x^2 - y^2$
24. $z = 4xy(6 - x - y)$
25. $z = 6x^2 + y^2 - xy + x + y$