§3-5 PROBLEM SET

Solve each radical equation.

1. $\sqrt{2x+1}=3$

2. $\sqrt{2-y}+1=5$

3. $5-\sqrt{2k}=3$

4. $9-\sqrt{t+2}=5$

5. $3-\sqrt{x+1}=0$

6. $\sqrt[3]{r}=2$

7. $\sqrt{x}-3=5$

8. $3-\sqrt{y+3}=0$

9. $4-\sqrt{x+1}=5$

10. $5-\sqrt{x+3}=3$

11. $t=\sqrt{6t-9}$

12. $t=2\sqrt{t-1}$

13. $x+2\sqrt{x+1}=7$

14. $x=\sqrt{6x+18}-3$

15. $x+2=\sqrt{2x+3}$

16. $3\sqrt{x-2}+2=x$

17. $x+3\sqrt{x-2}=12$

18. $a-4=2\sqrt{a-5}$

19. $\sqrt{x^2+3x-2}-x=1$

20. $x-1+\sqrt{x^2+3}=0$

21. $\sqrt{x^2-3x-1}=3$

22 $\sqrt{x}+\sqrt{x-7}=7$

23. $2=\sqrt{x-5}-\sqrt{x+16}$

24. $\sqrt{x}+\sqrt{x+11}=11$

25. $\sqrt{x+3}+\sqrt{x}=5$

26. $\sqrt{x+1}=2-\sqrt{x}$

27. $3\sqrt{c}-1=\sqrt{c}+1$

28. $\sqrt{m+10}-\sqrt{m-6}=2$

29. $\sqrt{2x+4}=3-\sqrt{2x}$

30. $2\sqrt{3w-5}-3\sqrt{w+1}=0$

31. $\sqrt{4s+3}=2\sqrt{s-1}+1$

32. $\sqrt{x}-\sqrt{x+8}=8$

33. $\sqrt{3+x}+\sqrt{x}=\dfrac{6}{\sqrt{3+x}}$

34. $\dfrac{5}{\sqrt{x-1}}+\dfrac{\sqrt{x+4}}{2}=2\sqrt{x-1}$

35. $\sqrt{x+7}=2-\sqrt{x-5}$

36. $2\sqrt{x+1}-\sqrt{2x}=\sqrt{x-4}$

37. $2\sqrt{x}-\sqrt{4x-22}=\sqrt{2}$

38. $\sqrt{x+9}-\sqrt{x+2}=\sqrt{4x-27}$