

Questions:

$$1. \sqrt{-4x+33} = x-3$$

$$2. \sqrt{10x+5} = 3x-1$$

$$3. \sqrt{7x+36} + 6 = x$$

$$4. \sqrt{x-14} = x-16$$

$$5. x = \sqrt{x+12}$$

$$6. \sqrt{3x-2} = 4x-3$$

$$7. \sqrt{x-2} = 2x-10$$

$$8. \sqrt{3x-1} = \sqrt{6x+2}$$

$$9. \sqrt{6x-3} = \sqrt{2x+95}$$

$$10. \sqrt[3]{3x^2+5x} = 2x$$

$$11. \sqrt{\sqrt{3x+36}} = \sqrt{3x+6} \quad \text{!!}$$

$$\textcircled{*} 12. \sqrt{2x^2+2} + 2 = \sqrt{12x+10}$$

$$13. 2x = \sqrt{-9+16x}$$

$$14. x = \sqrt{10+3x}$$

$$15. \sqrt{1-4x} = 3$$

$$16. \sqrt{x^2} = \sqrt{2x-15}$$

$$\textcircled{*} 17. \sqrt{(2x-5)} - \sqrt{(x-1)} = 1$$

$$18. \sqrt{4x-4} = 3x-4$$

$$19. 4\sqrt{\frac{5}{6}x+3} = \frac{10}{3}$$

$$20. \sqrt{2x+6} = 4x+6$$

$$21. x = \sqrt{8x-15}$$

$$22. -x\sqrt{x^2+6} = -\sqrt{12(x^2+\frac{4}{3})}$$

$$23. x = \sqrt{15x-54}$$

$$24. \frac{5}{\sqrt{x-1}} + \frac{\sqrt{x+4}}{2} = 2\sqrt{x-1}$$

$$25. \sqrt{\sqrt{\frac{x}{12}}} = \sqrt{\sqrt{x}}$$

$$26. \sqrt[3]{\sqrt{11x-13}} - 4 = -2$$

$$27. x = \sqrt{x+12}$$

$$28. \sqrt[4]{\sqrt{x^{-2}+2}} = \sqrt[4]{x^{\frac{1}{2}+1}}$$

$$29. \sqrt{x^2+(78x)^{\frac{4}{625}}} \cdot \sqrt[5]{42x \cdot 8888}$$

Answers:

1. $x = 6$

2. $x = 2$

3. $x = 19$

4. $x = 18$

5. $x = 4$

6. $x = 1$

7. $x = 6$

8. $x = 0$, no solution

9. $x = 24.5$

17. $x = 11.47$

18. 2

19. $x = 2.77$

20. $x = -1$

21. $x = 5.3$

22. $\sqrt{8}$

23. $x = 6.9$

24. $x = 5$

10. $x = 0, 1, -\frac{5}{8}$

11. $x = 0$

25. 144

12. $x = 6.464$

26. $x = 7$

13. $x = 3.32, 0.68$

27. $x = 4$

14. $x = 5$

28. No sol.

15. $x = -2$

16. $x =$ No solution

Washroom

