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$$1. 7 - 2x - \frac{1-3x}{7} = 2 - \frac{2x-1}{3}$$

$$2. 2x - \frac{3-7x}{6} = 5x - \frac{7x+1}{4}$$

$$3. 2 - \frac{10-5x}{4} = 3x - \frac{7x+10}{6}$$

$$4. \frac{6+5x}{9-2x} = 10 - \frac{4x-3}{9-2x}$$

$$5. 6x - \frac{13-x}{6} = 5 - \frac{5x-1}{4}$$

$$6. 3 - \frac{8-4x}{5-3x} = \frac{5x-3}{5-3x}$$

$$7. (1) 3x - y = -3$$

$$(2) x - 2y = 2$$

$$8. (1) 6x - 2y = 0$$

$$(2) 2x + y = 5$$

$$9. (1) 7x + 3y = 11$$

$$(2) 5x - 4y = 14$$

$$10. (1) 4x - 3y = 6$$

$$(2) 3x + 2y = 13$$

$$11. (1) 2x + 5y = 12$$

$$(2) 7x - 6y = -5$$

$$12. (1) 8x - 7y = 9$$

$$(2) 3x + 5y = 11$$

$$13. |2x + 3| = 5$$

$$14. |4x - 3| = 5$$

$$15. |3x - 7| = 2$$

$$16. |5 - 8x| = 13$$

$$17. |4x + 3| < 11$$

$$18. |5x - 7| \geq 2$$

$$19. 10 + 44x - 2x^2 = 10(x+1)^2$$

$$20. (3x-1)(2x+4) - 1 = (x-1)^2 + 5x$$

$$21. 6(x+1)^2 - 7(x-1) = 19$$

$$22. (5x+2)(3x-4) + 1 = (2x+1)^2$$

$$23. (4x+5)(4x-5) - 3 = (3x-2)^2 + 10x$$

$$24. (2x+2)(6x-1) + x + 2 = (4x+3)^2$$

$$25. 15x^2 - 3x + 3 > 3x^2 - 16x + 7$$

$$26. 5x^2 - x - 10 \geq 2x^2 + 6x + 10$$

$$27. 5x^2 + x \geq 3x^2 + 4x + 5$$

$$28. x^2 + 5x - 6 \geq 4x^2 - 4x$$

$$29. 6x^2 - x + 1 \leq 2x^2 - 6x + 7$$

$$30. 5x^2 - 3x + 2 > 3x^2 - 8x + 5$$

$$31. \sqrt{15 - 3x} + 1 = 2x$$

$$32. \sqrt{20 - 4x} = x - 2$$

$$33. \frac{3x-1}{\sqrt{x+1}} = \sqrt{x+13}$$

$$34. \sqrt{2x^2 - 3x - 10} - x = 0$$

$$35. \sqrt{13 - 4x} = 5x - 2$$

$$36. 2x + 9 = \sqrt{11 - 7x}$$

$$37. 16^{\sqrt{x}} = 4 \cdot 8^{\sqrt{x}}$$

$$38. 4^{\sqrt{x-1}} = 8^{x-8}$$

$$39. 2^{x+4} - 5 \cdot 2^{x+1} = 24$$

$$40. 12 \cdot 3^{x+1} - 72 = 3^{x+2} + 3^{x+1}$$

$$41. 9^x - 6 \cdot 3^x = 27$$

$$42. 10 \cdot 2^x - 4^x = 16$$

$$43. \lg(x-13) - \lg(x-3) = 1 - \lg 2$$

$$44. \log_2(x+1) + \log_2(x-1) = 3 + \log_2(x-2)$$

$$45. \lg \sqrt{x-5} + \lg \sqrt{2x-3} + 1 = \lg 30$$

$$46. 1 + \frac{1}{2} \lg(2x-1) = \lg(4x-2)$$

$$47. \frac{\lg(2x+10)}{2} = \lg(x+1)$$

$$48. \log_2(x+3) + \log_2(x-3) = 2 \cdot \log_2(x-1)$$

$$49. \left(\frac{9}{4}\right)^{2x-5} \leq \left(\frac{3}{2}\right)^{3x-7}$$

$$50. \left(\frac{1}{9}\right)^{4-5x} \leq \left(\frac{1}{3}\right)^{4-2x}$$

$$51. \left(\frac{3}{4}\right)^{3x} \leq \left(\frac{9}{16}\right)^{5-x}$$

$$52. \lg(18x + 20) > 2 + \lg(x - 8)$$

$$53. \log_{\frac{3}{4}}(5x + 6) \leq 0$$

$$54. \log_{\frac{2}{3}}(x + 14) < \log_{\frac{2}{3}}(22 - 3x)$$

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