Lineare und Quadratische Gleichungen

1. $2(\frac{4}{3}x - \frac{1}{2}) = \frac{137}{15} - \frac{8}{3}(4x - \frac{6}{5})$ — 1. $L = \{ \boxed{} \}$

2. $\frac{2}{5}(x + 1\frac{1}{5})(x + 1) = \frac{43}{50} + x(\frac{2}{5}x + \frac{1}{2})$ — 2. $L = \{ \boxed{} \}$

3. $\frac{1}{4}(x + 3\frac{1}{2})(x - \frac{2}{3}) = x(\frac{1}{4}x + \frac{1}{3}) - \frac{4}{3}$ — 3. $L = \{ \boxed{} \}$

4. $-3(9 + x) = -(-4x - 7) - 6$ — 4. $L = \{ \boxed{} \}$

5. $6(7x - 9) = 9(3x - 1) - 30$ — 5. $L = \{ \boxed{} \}$

6. $\frac{7}{2}(1 + x) = -\frac{4}{3}(\frac{2}{3} - 2x) - \frac{13}{9}$ — 6. $L = \{ \boxed{} \}$

7. $\frac{1}{2}(1 + \frac{1}{2}x) = \frac{77}{6} + (3x - \frac{4}{3})$ — 7. $L = \{ \boxed{} \}$

8. $8(2x - 6) = 75 + 9(x - 9)$ — 8. $L = \{ \boxed{} \}$

9. $\frac{7}{4}(x + \frac{1}{2})(x - \frac{9}{5}) = x(\frac{7}{4}x - \frac{8}{3}) - \frac{19}{24}$ — 9. $L = \{ \boxed{} \}$

10. $\frac{3}{2}(x + \frac{1}{3})(x + \frac{1}{4}) = x(\frac{3}{2}x + \frac{5}{4}) - \frac{5}{2}$ — 10. $L = \{ \boxed{} \}$

11. $(x + 2)^2 + (x + 1)^2 = 5 + 5(x - 3)(x + 3)$ — $L = \{ \boxed{} \}$

12. $13 - 4(x + 3) = x^2 + 4(x + 2)^2$ — $L = \{ \boxed{} \}$

13. $2x^2 - x - 2 = 7x^2 + 9x - 3$ — 13. $L = \{ \boxed{} \}$

14. $6x - x^2 + 7 = -9x - 4x^2 - 4$ — 14. $L = \{ \boxed{} \}$

15. $x^4 - 80\cdot x^2 + 1024 = 0$ — 15. $x_1 = \boxed{}$ $x_2 = \boxed{}$ $x_3 = \boxed{}$ $x_4 = \boxed{}$

16. $x^4 - 25\cdot x^2 + 144 = 0$ — 16. $x_1 = \boxed{}$ $x_2 = \boxed{}$ $x_3 = \boxed{}$ $x_4 = \boxed{}$

17. $\frac{7}{6}x^2 + \frac{1}{3}x - \frac{2}{5} = \frac{3}{2}x - 2x^2 + 1$ — 17. $L = \{ \boxed{} \}$

18. $-4\cdot x^2 + 16\cdot x + 308 = \boxed{}\cdot(\boxed{})\cdot(\boxed{})$

19. $8,8\cdot x^2 + 26,4\cdot x - 35,2 = \boxed{}\cdot(\boxed{})\cdot(\boxed{})$

20. $7,3\cdot x^2 + 43,8\cdot x + 58,4 = \boxed{}\cdot(\boxed{})\cdot(\boxed{})$

21. $8x^2 - 4x + 2 = x^2 - 8x + 373$ — 21. $L = \{ \boxed{} \}$

Lineare und Quadratische Gleichungen

1.	$2(\frac{4}{3}x - \frac{1}{2}) = \frac{137}{15} - \frac{8}{3}(4x - \frac{6}{5})$	1. $L = \{ \boxed{1} \}$
2.	$\frac{2}{5}(x + 1\frac{1}{5})(x + 1) = \frac{43}{50} + x(\frac{2}{5}x + \frac{1}{2})$	2. $L = \{ \boxed{1} \}$
3.	$\frac{1}{4}(x + 3\frac{1}{2})(x - \frac{2}{3}) = x(\frac{1}{4}x + \frac{1}{3}) - \frac{4}{3}$	3. $L = \{ \boxed{-2} \}$
4.	$-3(9 + x) = -(-4x - 7) - 6$	4. $L = \{ \boxed{-4} \}$
5.	$6(7x - 9) = 9(3x - 1) - 30$	5. $L = \{ \boxed{1} \}$
6.	$\frac{7}{2}(1 + x) = -\frac{4}{3}(\frac{2}{3} - 2x) - \frac{13}{9}$	6. $L = \{ \boxed{-7} \}$
7.	$\frac{1}{2}(1 + \frac{1}{2}x) = \frac{77}{6} + (3x - \frac{4}{3})$	7. $L = \{ \boxed{-4} \}$
8.	$8(2x - 6) = 75 + 9(x - 9)$	8. $L = \{ \boxed{6} \}$
9.	$\frac{7}{4}(x + \frac{1}{2})(x - \frac{9}{5}) = x(\frac{7}{4}x - \frac{8}{3}) - \frac{19}{24}$	9. $L = \{ \boxed{2} \}$
10.	$\frac{3}{2}(x + \frac{1}{3})(x + \frac{1}{4}) = x(\frac{3}{2}x + \frac{5}{4}) - \frac{5}{2}$	10. $L = \{ \boxed{7} \}$

11. $(x + 2)^2 + (x + 1)^2 = 5 + 5(x - 3)(x + 3)$ $L = \{ \boxed{5 ; -3} \}$

12. $13 - 4(x + 3) = x^2 + 4(x + 2)^2$ $L = \{ \boxed{-3 ; -1} \}$

13.	$2x^2 - x - 2 = 7x^2 + 9x - 3$	13. $L = \{ \boxed{0,1 \mid -2,1} \}$
14.	$6x - x^2 + 7 = -9x - 4x^2 - 4$	14. $L = \{ \boxed{-4,11 \mid -0,89} \}$
15.	$x^4 - 80 \cdot x^2 + 1024 = 0$	15. $x_1 = \boxed{8}$ $x_2 = \boxed{-x_1}$ $x_3 = \boxed{4}$ $x_4 = \boxed{-x_3}$
16.	$x^4 - 25 \cdot x^2 + 144 = 0$	16. $x_1 = \boxed{4}$ $x_2 = \boxed{-x_1}$ $x_3 = \boxed{3}$ $x_4 = \boxed{-x_3}$
17.	$\frac{7}{6}x^2 + \frac{1}{3}x - \frac{2}{5} = \frac{3}{2}x - 2x^2 + 1$	17. $L = \{ \boxed{-0,51 \mid 0,87} \}$

18. $-4 \cdot x^2 + 16 \cdot x + 308 = \boxed{-4} \cdot (\boxed{x + 7}) \cdot (\boxed{x - 11})$

19. $8,8 \cdot x^2 + 26,4 \cdot x - 35,2 = \boxed{8,8} \cdot (\boxed{x + 4}) \cdot (\boxed{x - 1})$

20. $7,3 \cdot x^2 + 43,8 \cdot x + 58,4 = \boxed{7,3} \cdot (\boxed{x + 2}) \cdot (\boxed{x + 4})$

21.	$8x^2 - 4x + 2 = x^2 - 8x + 373$	21. $L = \{ \boxed{-\frac{53}{7} \mid 7} \}$