

Polynom-Division

1. $x^3 + 8x^2 + 19x + 12 = 0$

2. $x^3 + 9x^2 + 11x - 21 = 0$

3. $x^3 - 7x^2 - 6x + 72 = 0$

4. $x^3 + x^2 - 16x + 20 = 0$

5. $x^3 + 2x - 6x^2 - 12 = 0$

6. $x^4 + 8x^3 - 12x^2 - 144x = 0$

7. $x^4 - 25x^2 + x^3 - 25x = 0$

8. $x^4 - 2x^3 - 13x^2 + 14x + 24 = 0$

9. $x^4 + 4x^3 - 2x^2 + 12x - 15 = 0$

10. $x^4 - 6x^3 - 3x^2 + 52x - 60 = 0$

11. $x^3 - 4x^2 - 2x + 8 = 0$

12. $x^4 - 4x^3 - 8x^2 + 12x + 15 = 0$

13. $6x^4 + x^5 + 6x^3 - 16x - 12x^2 = 0$

14. $\frac{1}{2}x^4 + 6x^3 + 16x^2 - 24x - 72 = 0$

15. $0,4x^6 - 4x^5 + 10,4x^4 - 4x^3 + 10x^2 = 0$

1. $\{-4; -3; -1\}$

2. $\{-7; -3; 1\}$

3. $\{-3; 4; 6\}$

4. $\{2; -5\}$

5. $\{6\}$

6. $\{-6; 0; 4\}$

7. $\{-5; -1; 0; 5\}$

8. $\{-3; -1; 2; 4\}$

9. $\{-5; 1\}$

10. $\{-3; 2; 5\}$

11. $\{\pm\sqrt{2}; 4\}$

12. $\{-1; \pm\sqrt{3}; 5\}$

13. $\{-4; -2; 0; \pm\sqrt{2}\}$

14. $\{-6; \pm 2\}$

15. $\{0; 5\}$

Berechnen Sie mit der angegebenen Lösung:

16. $x^3 + 7x^2 - \frac{31}{4}x + 2 = 0$; $x_1 = \frac{1}{2}$

$L = \{-8; \frac{1}{2}\}$

17. $3x^3 - 14x^2 - 7x + 10 = 0$; $x_1 = \frac{2}{3}$

$L = \{-1; \frac{2}{3}; 5\}$

18. $x^3 - 2,15x^2 - 0,85x - 0,3 = 0$; $x_1 = -\frac{2}{5}$

$L = \{-\frac{2}{5}; -\frac{3}{4}; 1\}$

19. $18x^3 - 21x^2 - 10x + 8 = 0$; $x_1 = \frac{4}{3}$

$L = \{-\frac{2}{3}; \frac{1}{2}; \frac{4}{3}\}$

20. $x^3 + 1,6x^2 - 1,23x + 0,198 = 0$; $x_1 = 0,3$

$L = \{-2; 0,3; 2\}$