

$(x^5 + 7x^3 + 2x^2 + 5) : (x^2 + 9) = 525$
 $(x^5 + 7x^3 + 2x^2 + 5) + (x^2 + 9) = x^5 + 7x^3 + 3x^2 + 14$
 $(x^5 + 7x^3 + 2x^2 + 5) - (x^2 + 9) = x^5 + 7x^3 + x^2 - 4$
 $(x^5 + 7x^3 + 2x^2 + 5) \cdot (x^2 + 9) = x^7 + 4x^5 + 2x^4 - 5x^2 + 9x + 63x^3 + 18x^2 + 45 = x^7 + 16x^5 + 2x^4 + 63x^3 + 23x^2 + 45$

$3646 : 7 = 525$
 $3646 : 7 = 525 + \frac{1}{7}$
 $-(x^5 + 9x^3) = -x^5 - 9x^3$
 $-(-2x^2 - 18x) = 2x^2 + 18x$

$(x^5 + 7x^3 + 2x^2 + 5) : (x^2 + 9) = x^3 - 2x + 2$
 $-x^5 + 9x^3$
 $-2x^3 + 2x^2 + 5$
 $+2x^3 + 18x$
 $2x^2 + 18x + 5$
 $-2x^2 + 18$
 $18x - 13$
 $(x^5 + 7x^3 + 2x^2 + 5) : (x^2 + 9) = x^3 - 2x + 2 + \frac{18x - 13}{x^2 + 9}$
 $\frac{x^5 + 7x^3 + 2x^2 + 5}{x^2 + 9} = -4 - \frac{18x - 13}{x^2 + 9}$
 $5(2x^2 + 18) = -2x^2 - 18$

$x^3 - 12x + 16 = 0$
 $\alpha = \frac{p}{q} = \pm 1, \pm 2, \pm 4, \pm 8, \pm 16$
 $p = \pm 1, \pm 2, \pm 4, \pm 8, \pm 16$
 $q = 1$
 $x^3 - 12x + 16$
 $1: 1 - 12 + 16 \neq 0$
 $-1: -1 + 12 + 16 \neq 0$

HORNEROVA SCHEMA
 $x^3 - 12x + 16 = (x-2)(x^2 + 2x - 8)$
 $= (x-2)(x-2)(x+4)$
 $x^3 - 12x + 16 = (x-2)^2(x+4)$
 $K = \{-4, 2\}$

	1	x ³	0	x ²	-12	x	16	x ⁰
1	1	x ²	0	x	-12	0	16	
2	1	x	0	0	0	0	0	

$(x^3 - 12x + 16) : (x - 2) = x^2 + 2x - 8$
 $-x^3 + 2x^2$
 $2x^2 - 12x + 16$
 $-2x^2 + 4x$
 $-8x + 16$
 $+8x - 16$
 0
 $x = 1$

$4x^5 - 17x^4 + 24x^3 - 13x^2 + 2x = x(4x^4 - 17x^3 + 24x^2 - 13x + 2)$
 $\alpha = \frac{p}{q} = \pm 1, \pm 2, \pm 4$
 $p = \pm 1, \pm 2$
 $q = 1, 2, 4$
 $4x^4 - 17x^3 + 24x^2 - 13x + 2$
 $1: 4 - 17 + 24 - 13 + 2 = 0$

	4	x ⁴	-17	x ³	24	x ²	-13	x	2	x ⁰
1	4	x ³	-13	x ²	11	x	-2	0	0	
2	4	x ²	-9	x	2	0	0	0	0	

$(x-1)(4x^3 - 13x^2 + 11x - 2)$
 $(x-1)(x-1)(4x^2 - 9x + 2)$
 $(x-1)(x-1)(x-2)(4x-1)$

$4x^5 - 17x^4 + 24x^3 - 13x^2 + 2x = x(x-1)(x-2)(4x-1)$
 $K = \{0, 1, 2, \frac{1}{4}\}$

$(x^4 + x^3 + x^2 + 11x + 10) : (x+1) = 10$
 $p = \pm 1, \pm 2, \pm 5, \pm 10$
 $q = 1$
 $\alpha = \frac{p}{q} = \pm 1, \pm 2, \pm 5, \pm 10$
 $= -1, -2, -5, -10$

$x^4 + x^3 + x^2 + 11x + 10 = (x+1)(x+2)(x^2 - 2x + 5)$
 $K = \{-2, -1\}$
 $x^2 - 2x + 5 = 0 \rightarrow$ NEHA' REALNE KODENE
 $-b \pm \sqrt{D}$
 $2a$
 $D = b^2 - 4ac = (-2)^2 - 4 \cdot 1 \cdot 5 = 4 - 20 = -16$