

CS318 – P06 Polynomial Sample Run

Items highlighted in yellow are example entries or statements. You should test these as well as other combinations.

*** P07 Polynomial Driver Sample Run ***

LINE 15 * Entry for p1: 1 2 3 4 5 6 0 => 1 2 3 4 5 6 0

p1:

Number terms 3

$5x^6 + 3x^4 + x^2$

LINE 20 * Entry for p2: 1 2 3 4 5 6 0 => 1 2 3 4 5 6 0

p2:

Number terms 3

$5x^6 + 3x^4 + x^2$

LINE 25 * (p1 == p2) *: true

LINE 28 * p1 += p2 *:

Number terms 3

$10x^6 + 6x^4 + 2x^2$

LINE 32 * p1 -= p2 *:

Number terms 3

$5x^6 + 3x^4 + x^2$

LINE 36 * p1 = mono(-10, 7) *:

Number terms 1

$-10x^7$

LINE 40 * p1 -= mono(-10, 7) *:

Number terms 0

LINE 44 * p1 += mono(-10, 7) *:

Number terms 1

$-10x^7$

LINE 48 * p1 = poly(mono(-10, 7)) - poly(mono(-10,7)) + poly(mono(-10,7)) *:

Number terms 1

$-10x^7$

LINE 53 * Entry for p3: 1 2 5 1 1 0 0 => 1 2 5 1 1 0 0

p3:

Number terms 3

$x^2 + 5x + 1$

LINE 57 * Entry for p4: 3 2 -10 1 15 0 0 => 3 2 -10 1 15 0 0

p4:

Number terms 3

$3x^2 - 10x + 15$

LINE 62 * p3 *= p4 *:

Number terms 5

$3x^4 + 5x^3 - 32x^2 + 65x + 15$

LINE 64 * (p3 == p4) *: false

LINE 67 * p5 = move(p2) *:

Number terms 3

$5x^6 + 3x^4 + x^2$

LINE 71 * Entry for p6: 1 2 -3 4 -1 6 0 => 1 2 -3 4 -1 6 0

p6:

Number terms 3

$-x^6 - 3x^4 + x^2$

LINE 76 * result = p6.evaluate(2) *: -108