**MODUL PRAKTIKUM SISTEM KENDALI 2**



**DISUSUN OLEH:**

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**PROGRAM STUDI D3 MEKATRONIKA**

**POLITEKNIK TAKUMI**

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Praktikum Sistem Kendali 2

Modul 2 EKSPANSI PECAHAN PARSIAL DARI POLINOMIAL RASIONAL

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Latihan 2.1

Hasil

Solusi Latihan 2.1

|  |
| --- |
| >> num = [1 2];  >> den = [1 6 5 0];  >> [c,p,k] = residue(num,den)  c =  -0.1500  -0.2500  0.4000  p =  -5  -1  0  k =  [] |

Latihan 2.2

Hasil

Solusi Latihan 2.2

|  |
| --- |
| >> c = [4;2.5;-1];  >> p = [1;-4.5;2];  >> k = 2;  >> [num,den] = residue(c,p,k)  printsys(num,den)  num =  2.0000 8.5000 -24.0000 -8.5000  den =  1.0000 1.5000 -11.5000 9.0000    num/den =    2 s^3 + 8.5 s^2 - 24 s - 8.5  ----------------------------  s^3 + 1.5 s^2 - 11.5 s + 9 |

Latihan 2.3

Hasil

Solusi Latihan 2.3

|  |
| --- |
| >> num = [1 4 5];  >> den = [1 3 3 1];  >> [c,p,k] = residue(num,den)  c =  1.0000  2.0000  2.0000  p =  -1.0000  -1.0000  -1.0000  k =  []  >> [num,den] = residue(c,p,k)  printsys(num,den)  num =  1 4 5  den =  1.0000 3.0000 3.0000 1.0000    num/den =    s^2 + 4 s + 5  ---------------------  s^3 + 3 s^2 + 3 s + 1 |