Tromsformoda de Laplace
L = Glu(d) mix = (1)
PARTE 1) H(S) = 50 (S+5)
(5+5)(5+1)
- 1 + Sx .
(a) Tromsformoda inversa → roiges [-5, -1] → 1 (*1)
[Galoc = (a)H g   D-2/a)X
50.(s+5) = K1 + K2  (Fumcpes PARCIAIS)
(5+5)(5+1)(5+5)(5+1)
otoria do denominado conclusão exterio atrova
$50(s+5) = h_1(s+5) + h_2(s+5)$
(x+5)(x+1) $(x+5)$ $(x+1)$
[8+x2+6x2+6x2+4x]) atoo)
onole s=-5
11-20 11-20 11-20 11-20 12-20
50 (5+5) = K1 + K2 (8+5)
$(3+1) \qquad (3+1)$
(1+a) (1-a) (2+a) (1+a) (1+a) (2+a) (2+a)
$50.(0) = 41 + 0 \sim 141 = 0$
Charlet Mitch Charlet March - March March (Ander)
(1-1) (1-1) (2-1) (1-1) (1-1) (1-1) (1-1)
$50(s+5).(s+1) = K_1(s+1) + K_2(s+1)$
(S+5)(S+1) (S+5) (S+1) [1-2] dyo
ond $> = -1$ $= 181 = 066 + (1-)07$
(1+1-X1-X0+1-)
50 = 0 + H2 ~ [H2 = 50]
$M(s) = 0$ + 50 <=> $h(t) = 50e^{-t}u(t)$

(c) emcantror X(x) come X(t) = sim(t)u(t)08 = 32+1 ou seja, pela tobela simbtuit <=> 5 32+52 X(s) = 1 e H(s) = 50(s+5)(D+5)(D+1) otrovég do demominador corocterístico extrocado otrovég da operação X(x). H(x) foi possíve colculor os roises roots [[34+633+632+63+5]] (1=-5; (2=-1; (3=+); (4=-) 50 b + 250 (s+1)(s+5)(s-1)(s+1) (s+1)(s+1) (s+1)(s+1)(50x+250)(x+1) = K1(x+1) + K2(x+1) + K3(x+1) + K4(x+1) (s+1)(s+5)(s+i) (s+1) (s+5) (s-i) 12-= d some H1 = 25 50 (-1) +250 (-1+5)(-1-1)(-1+2) (tilibra)

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(50 x + 250) (x+5) = K4 (x+5) + K2(x+5) + K3(x+5) + K4(x+5)
   (D+1) (D+5) (D-3) (D+1)
                             (3+5)
                                            (n-")
                 50.(-5) = -250 +250 = 0
onol 5 = -5
  H2=0
(50x+250)(x/1) = K1(x-1)+ K2(x-1)+ K3(x-1)+K4(x-1)
(D+1)(D+5)(D-9)(D+9) (D+1)
 Onde [ D=+i
                    = 163=-12,5-912,5
    ° 50 + 250
    (3+1)(3+5)(32)
(50x+250)(x+3) = K1(x+3) + K2(x+3) + K3(x+3) + K4(x+3)
(D+1)(D+5)(D-3)(D+3) (D+3) (D+5)
onde s=i
-350 + 250  ( ) = 154 = -12.5 + 312.5
(D+1)(D+5)(D-3)(D+3)
 y(x) = 25 + 0 + (-12.5 - 12.5) - 12.5 + 12.5

(x+1) (x+5) (x-1) (x+1)
                    frossomdo p/ dominio cempo
 y(t) = (25e-t + 17,677 e 32,35 e 5t + 17,677 e 12,35 e 5t) M(t)
                                                  (tilibra)
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