
★ List of Inverse Laplace Transform Puzzles

1 Partial Fraction Decomposition Puzzle

Given $F(s) = \frac{s+3}{(s+1)(s+2)}$, break it into partial fractions and find $f(t)$.

2 Repeated Roots Challenge

Given $F(s) = \frac{2}{(s+3)^2}$, find the inverse transform and interpret the time-domain behavior.

3 Completing the Square Trick

Given $F(s) = \frac{s+2}{s^2+4s+13}$, complete the square in the denominator and find the inverse.

4 Shift Theorem Puzzle

Given $F(s) = e^{-2s} \frac{1}{s+3}$, use the time-shifting property to find $f(t)$.
