# A DIFFERENTIAL EQUATION

THE PROBLEM. We solve the differential equation $f'' + 9f' + 14f = t$ for the unknown function $f$.

1) FIND THE KERNEL of $T(f) = (D^2 + 9D + 14)f$.

1) FINDING A PARTICULAR SOLUTION $T(f) = t$.

THE GENERAL SOLUTION IS THE SUM OF THE $f_h$ and $f_p$.