

In[1]:= **H3[s_] := 1 / ((1 + s / (α * ξ)) * (s^2 + 10 * ξ * s + 25))**

In[2]:= **Apart[H3[s], s]**

Out[2]=
$$\frac{\alpha \xi}{(s + \alpha \xi) (25 - 10 \alpha \xi^2 + \alpha^2 \xi^2)} + \frac{-s \alpha \xi - 10 \alpha \xi^2 + \alpha^2 \xi^2}{(25 + s^2 + 10 s \xi) (25 - 10 \alpha \xi^2 + \alpha^2 \xi^2)}$$