$$X(s) = \frac{s+1}{s(s^2+4s+6)} = \frac{A}{s} + \frac{Bs+C}{s^2+4s+6}$$

$$A = \frac{s+1}{s^2+4s+6}\bigg|_{s=0} = \frac{1}{6}$$

$$\frac{s+1}{s(s^2+4s+6)} = \frac{\frac{1}{6}}{s} + \frac{Bs+C}{s^2+4s+6}$$

$$= \frac{\frac{1}{6}s^2 + \frac{4}{6}s + 1 + Bs^2 + Cs}{s^2+4s+6}$$

$s^2$: $\quad 0 = \frac{1}{6} + B \quad \Rightarrow \quad B = -\frac{1}{6}$

$s$: $\quad 1 = \frac{4}{6} + C \quad \Rightarrow \quad C = \frac{1}{3}$