1D Abs Inf (solution)

Green's function

$$v(z,t|z',t'=0) = \frac{1}{2\sqrt{\pi D_1 t}}[e^{-(z-z')^2/(4D_1 t)} - e^{-(z+z')^2/(4D_1 t)}].$$

Survival probability

$$S_{z=0}(t) = \int_0^\infty v dz = \mathrm{erf}(\frac{z'}{2\sqrt{D_1 t}}).$$

Propensity functions

$$q_{z=0}(t) = -\frac{d}{dt} S_{z=0}(t) = \frac{z'}{2\sqrt{\pi D_1 t^3}} e^{-z'^2/4Dt}.$$

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