
Задача 1. Пусть $C(t, S_t; T, K)$ – цена колл-опциона в модели БШ:

$$C(t, S_t; T, K) = S_t \cdot N(d_1) - e^{-rT} K \cdot N(d_2)$$

где

$$d_1 = \frac{\log(S_t/K) + r(T-t)}{\sigma\sqrt{(T-t)}} + \frac{\sigma\sqrt{(T-t)}}{2}$$
$$d_2 = d_1 - \sigma\sqrt{T-t}$$

Найти греки:

$$\Delta = \frac{\partial C}{\partial S_t}$$
$$\Gamma = \frac{\partial^2 C}{\partial S_t^2}$$
$$\nu = \frac{\partial C}{\partial \sigma}$$
$$\Theta = \frac{\partial C}{\partial t}$$