

## Domáca úloha 10: 4mef1, 4mef2

1. Zistite, pre aké hodnoty parametrov  $\alpha, \beta$  má nasledovná nehomogénna rovnica vedenia tepla na priamke riešenie v tvare  $u(x, t) = t^\alpha f(x/t^\beta)$ :

- [zadanie pre 4mef1]:  $\frac{\partial u}{\partial t} - a^2 \frac{\partial^2 u}{\partial x^2} = 1$
- [zadanie pre 4mef2]:  $\frac{\partial u}{\partial t} - a^2 \frac{\partial^2 u}{\partial x^2} = x$