1 Równanie

$$\frac{d}{dx}(-k(x)\frac{du(x)}{dx}) = 0$$
$$u(2) = 0$$
$$\frac{du(0)}{dx} + u(0) = 20$$
$$k(x) = \begin{cases} 1 & \text{dla } x \in [0,1] \\ 2 & \text{dla } x \in (1,2] \end{cases}$$

Gdzie u to poszukiwana funkcja

$$[0,2] \ni x \to u(x) \in \mathbb{R}$$