

$$(4) \quad f(x) = ax^2 + bx + c$$

$$f'(x) = 2ax + b$$

$$\text{I} \quad f(-100) = 50$$

$$\text{II} \quad f(0) = 0$$

$$\text{III} \quad f'(0) = -0,2$$

$$\text{I} \quad 50 = 10000a + 100b + c$$

$$\text{II} \quad 0 = c$$

$$\text{III} \quad -0,2 = b$$

$$\text{I}' \quad 50 = 10000a + 100 \cdot (-0,2) + 0$$

$$30 = 10000a$$

$$0,003 = a$$

$$\underline{\underline{f(x) = 0,003x^2 - 0,2x}}$$