

fig. 10.1. Solution of the equation  $x' = (x-1)(x-3) \frac{t^3}{t^4+1}$  satisfying the initial condition  $x(1)=2$ .

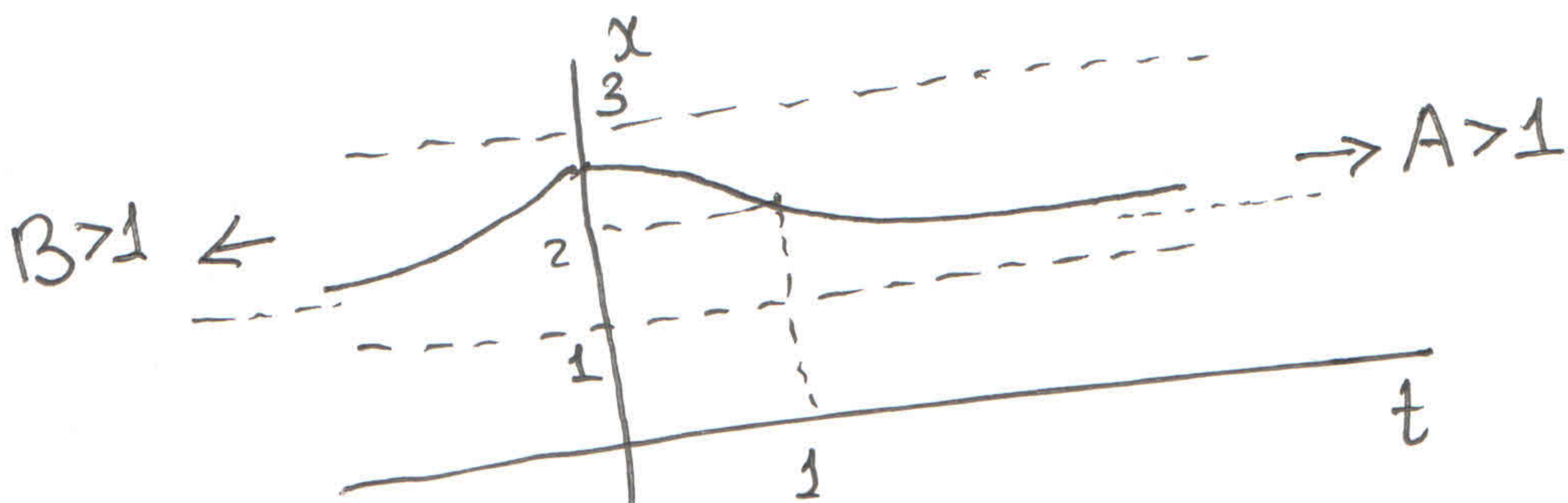


fig. 10.2. Solution of the equation  $x' = (x-1)(x-3) \frac{t^3}{(t^4+1)^2}$  satisfying the initial condition  $x(1)=2$ .

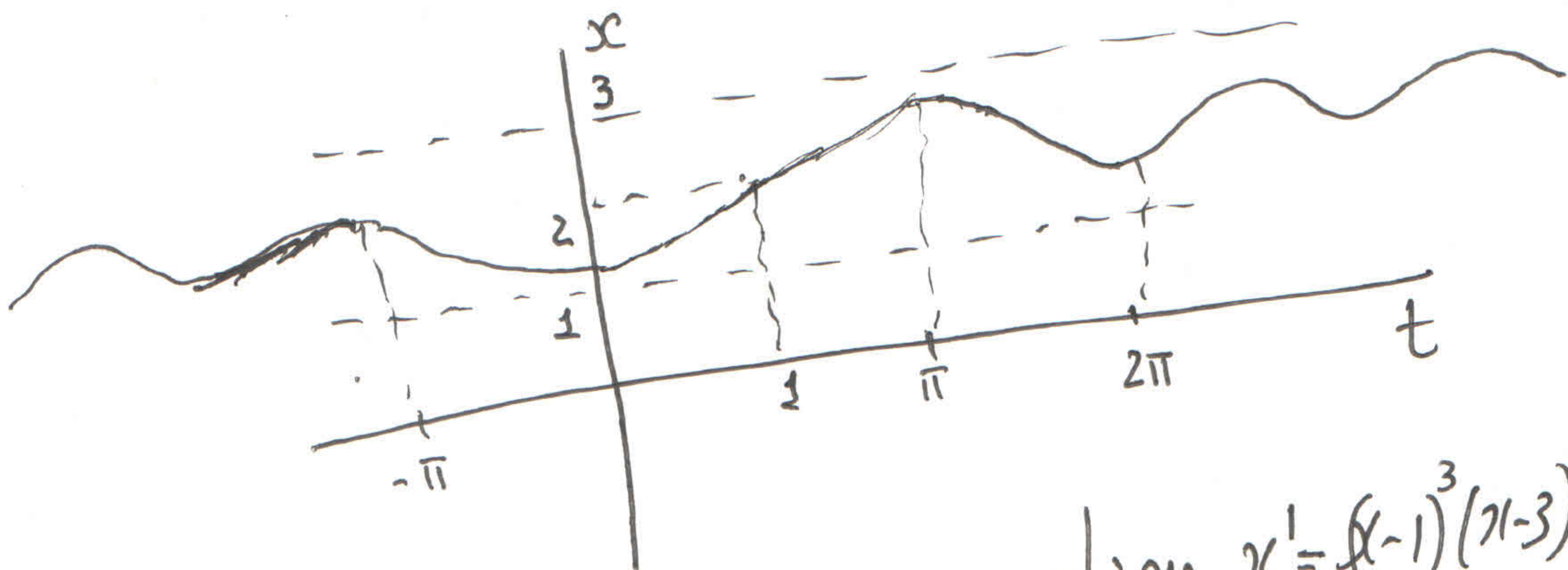


fig 10.3 Solution of the equation  $x' = (x-1)^3(x-3)^2 \sin t$  satisfying the initial condition  $x(1)=2$ .



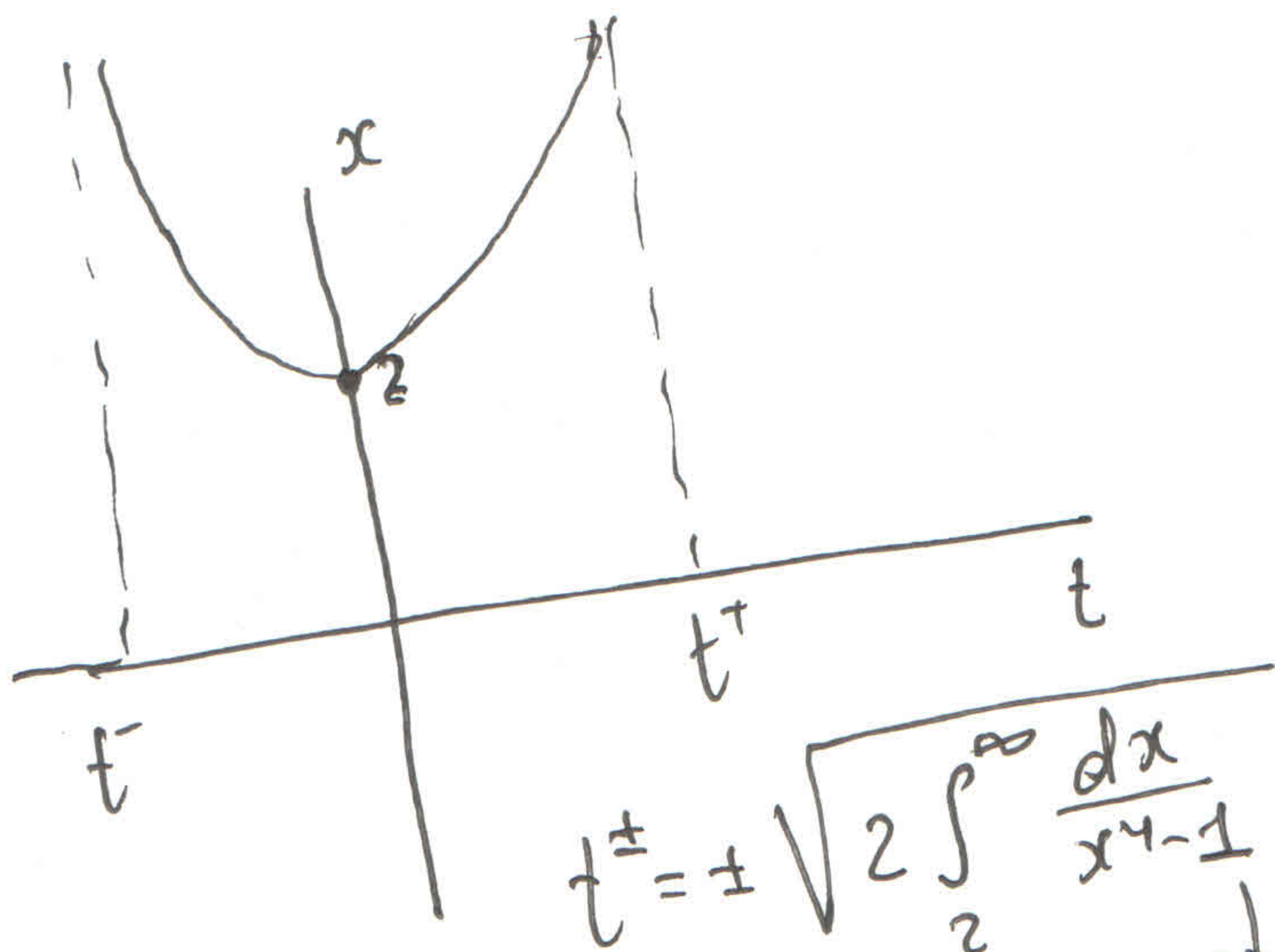


fig 10.4. Solution of the equation  $x' = (x-1)^4$ .  $t$  satisfying the initial condition  $x(0) = 2$ .

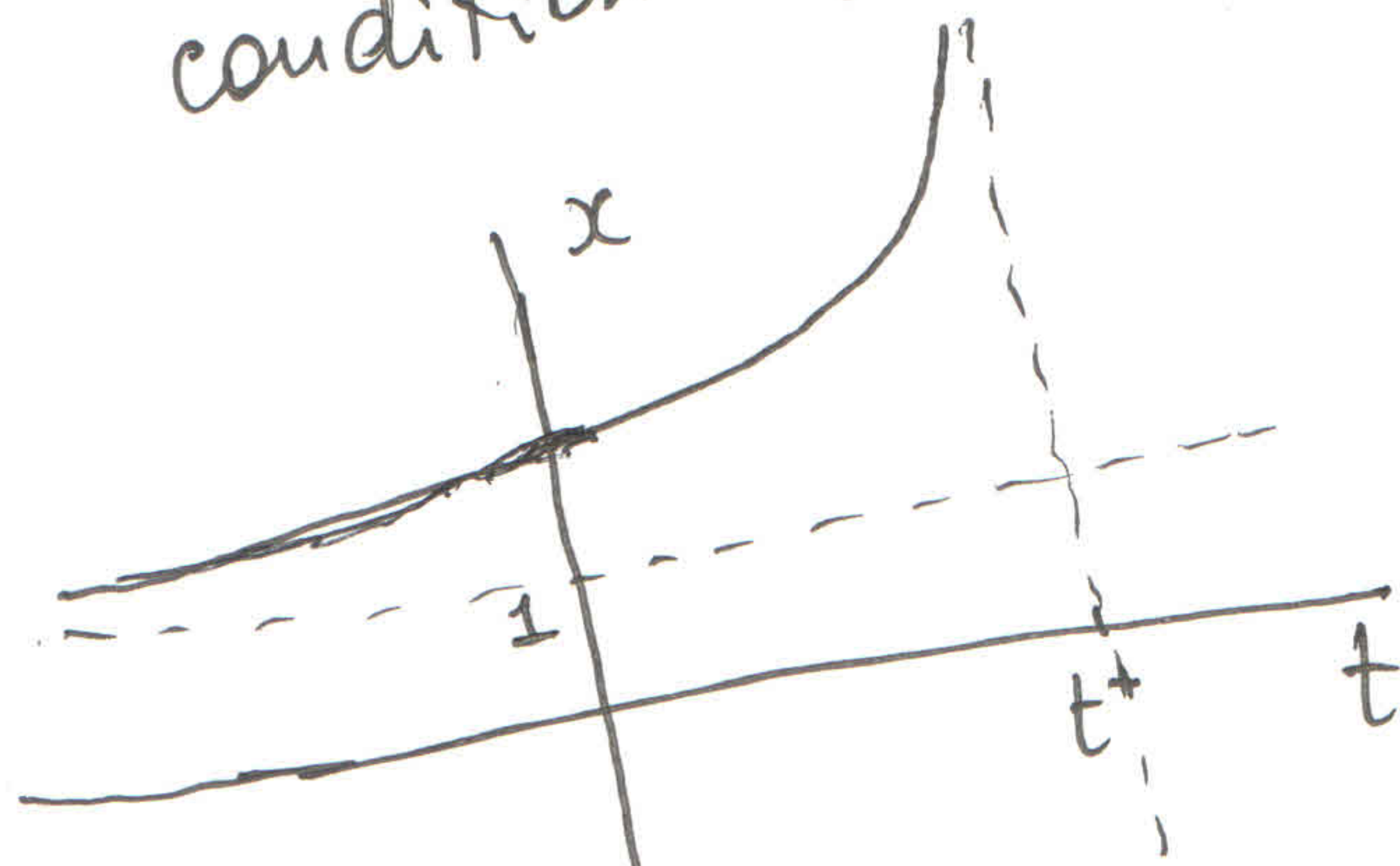


fig 10.5. Solution of the equation  $x' = (x-1)^4$ .  $t^2$  satisfying the initial condition  $x(0) = 2$ .



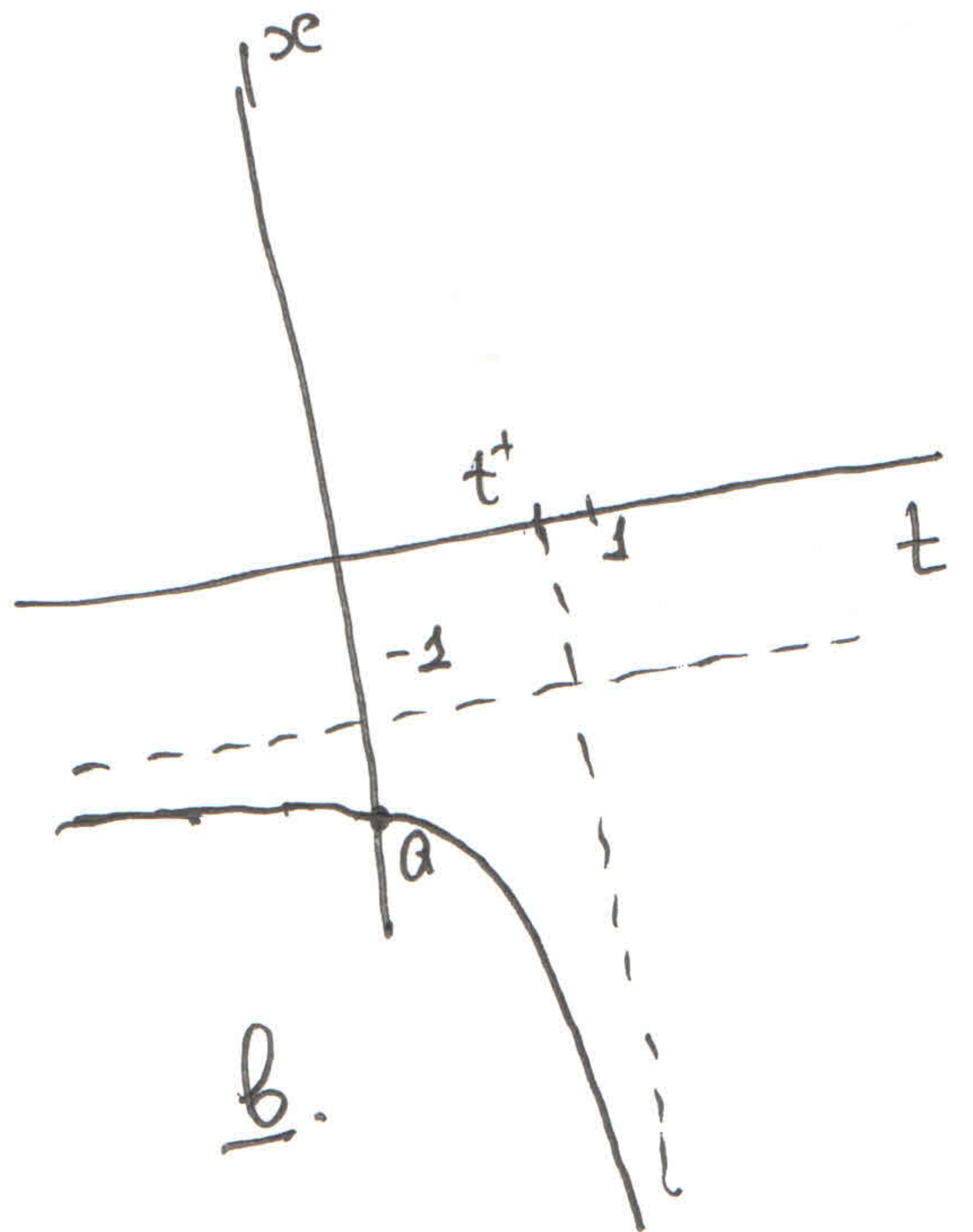
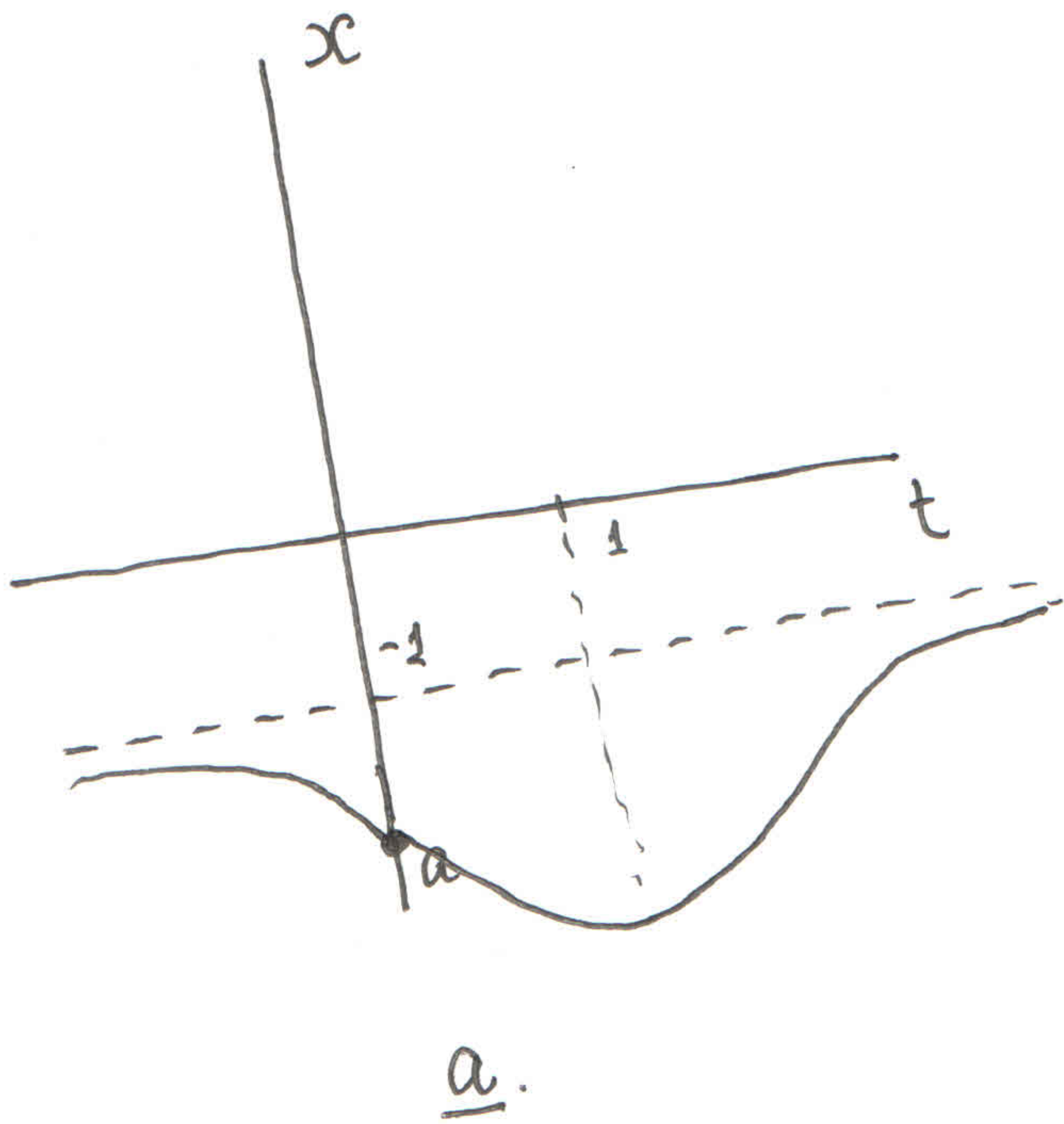


fig 10.6. Solution of the equation  $x' = (x^2 - 1)(t - 1)$  satisfying the initial condition  $x(0) = a < -1$  is a. or b. When a. and when b.?

Answer

$$M = \frac{1+l}{1-l} \approx -2.16 \quad a \in (-1, M) \Rightarrow a.$$

$$a \leq -M \Rightarrow b.$$