

**Problem 21**

Consider the initial value problem  $y' = y^{1/3}$ ,  $y(0) = 0$  from Example 3 in the text.

- (a) Is there a solution that passes through the point  $(1, 1)$ ? If so, find it.
- (b) Is there a solution that passes through the point  $(2, 1)$ ? If so, find it.
- (c) Consider all possible solutions of the given initial value problem. Determine the set of values that these solutions have at  $t = 2$ .