

1) Use logarithmic differentiation to find the derivative of

$$y = \sqrt{\frac{x-1}{x^4+1}}$$

2) When a cold drink is taken from a refrigerator, its temperature is 5°C . After 25 minutes in a 20°C room its temperature has increased to 10°C . Set up the formulas, but do not solve:

(a) What is the temperature of the drink after 50 minutes?

(b) When will the temperature be 15°C ?