

[nex4] Educated guess

A railroad company numbers its locomotives in order, $1, 2, \dots, N$.

(a) One day, you see a locomotive, and its number is 60. What is your best guess for the total number N of locomotives which the company owns?

(b) On the following days, you see four more locomotives, all with numbers smaller than 60. What is your best guess for N based on this additional information?

Describe your reasoning carefully and in detail.

Solution: