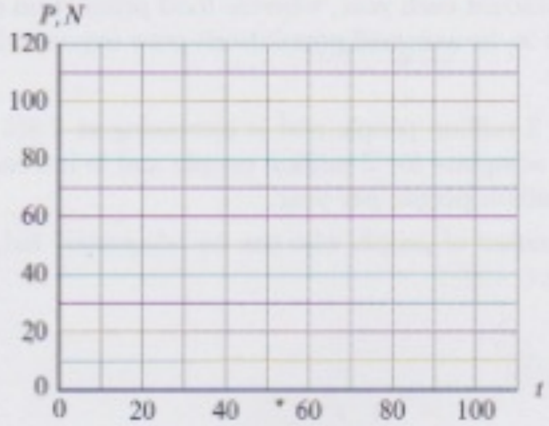
Example. (continued)

c. Suppose the country had double its initial food supply (but other conditions do not change). Find a formula for N and sketch graphs of P and N. When will food shortages occur?



d. Suppose that, in addition to doubling its initial food supply, the country doubled the rate at which its food supply increases. Find a formula for N and sketch graphs of P and N. When will food shortages occur?