

1. A sausage factory uses two machines for food processing: the machine A can process 1 Tonne of meat in 2 hours, while the machine B takes 3 hours to process the same amount of meat. The goal is to process a total of 4 Tonnes on a lapse of 6 hours; to better coordinate the supply chain, both machines should end their processing at the same time. How much meat should process each machine?

Suppose the processing times are proportional to the given quantities, i.e. machine A will process  $\frac{1}{2}$  T of meat in 1 hour, and  $\frac{1}{4}$  in  $\frac{1}{2}$  hour and so on.