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Now there be three daughters. The elder daughter returneth once every five days; the middle daughter returneth once every four days; and the younger daughter returneth once every three days. We ask: how many days meet the three daughters with each other?

Answer saith: sixty days.

I don't understand how this method gives the LCM of three numbers instead of their product.

Method saith: put down the elder daughter's five days, the middle daughter's four days and the younger daughter's three days on the right, and for each, display one rod on the left. ~~for the elder daughter's five days, the middle daughter's four days and the younger daughter's three days~~ Multiplying them in linkage, resulteth in the number ~~which each arriveth~~ which each arriveth. For the elder daughter, twelve arrivals; the middle daughter, fifteen arrivals; and the younger daughter, twenty arrivals. Also multiplying each number of arrivals by the days of return, we are done.

答曰：今有一女，歸有三日，中女，歸有四日，長女，歸有五日。問：幾日相會？

術曰：置長女五日，中女四日，少女三日於左方。緝於右方，各得一。又中女各得四，少女各得三，長女各得二。乘之，各得十二，十五，二十。乘之，各得六十。即得。

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