

Task8 Math Puzzle

(1 point)

Deadline: Monday 22.5. 2017 9:00 am

X and Y are two different whole numbers greater than 1. Their sum is no greater than 100, and Y is greater than X . S and P are two mathematicians (and consequently perfect logicians); S knows the sum $X + Y$ and P knows the product $X * Y$. Both S and P know nothing about X and Y but the facts listed in this paragraph. The following conversation occurs:

- S says " P does not know X and Y ."
- P says "Now I know X and Y ."
- S says "Now I also know X and Y ."

Can the input of $X=4$ and $Y=13$ result in this conversation?