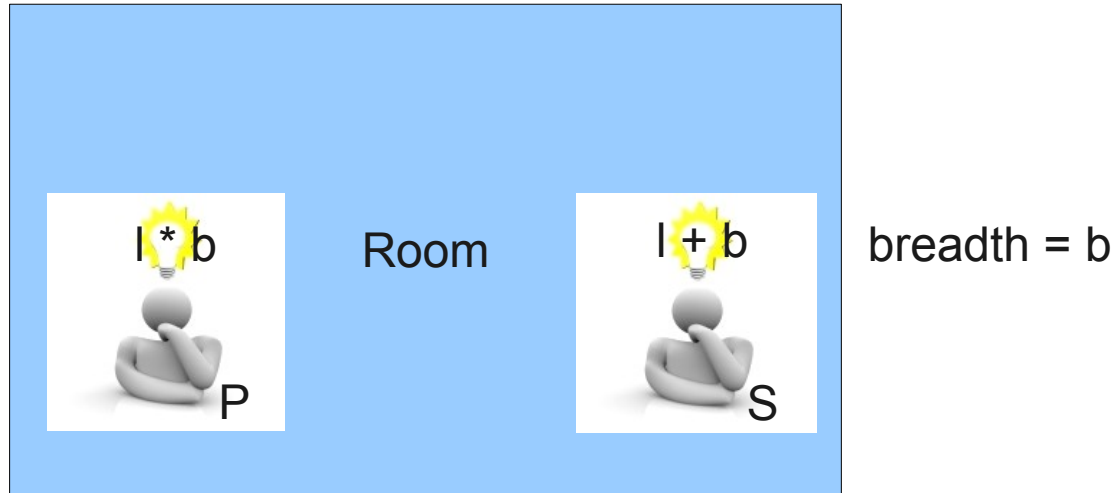


length =  $l$



Common knowledge (everybody knows that everybody knows):

- 1)  $l$  and  $b$  are integers,  $2 \leq b \leq l \leq 99$
- 2) P (product) knows  $l * b$  (but S does not, and P does not tell him).
- 3) S (sum) knows  $l + b$  (but P does not, and S does not tell him).

Conversation:

P: "I don't know  $l$  or  $b$ ."

S: "I knew that."

S: "I don't know  $l$  or  $b$  either."

P: "Now I know  $l$  and  $b$ ."

S: "Now I know  $l$  and  $b$ ."

Question:

What are  $l$  and  $b$ ?