

A78 B163(158) C52307(3.31) D91

Vol. III 31

Now there be pheasants and rabbits in the same cage, and there be thirty-five heads above, and there be ninety-four feet below. we ask: how many be each of pheasant and rabbit?

Heads: $f + r = 35$

Feet: $2f + 4r = 94$

Answer saith: twenty-three pheasants; ~~and~~ rabbits: twelve.

雉兔: see 《禮記·內則》

Method saith: put down the thirty-five heads above, and put down the ninety-four feet below. ~~Now~~ ~~the~~ ~~number~~ Halving the ^{number} of feet resulteth in forty-seven. Diminish the greater by the lesser, and command them again. For the three above, remove three ^{from} below; for the five above, remove five ^{from} below. There be ~~five~~ one below: remove one ^{from} above; there be two below: remove two ^{from} above; and we are done.

$$f + 2r = 47$$

$$- \quad f + r = 35$$

$$- \quad \quad \quad r = 12$$

$$- \quad \quad \quad f = 23$$

C err. ~~missing~~ 有 in 下有九十四足.

十答四三今
一曰足十有
雉問五雉
二雉頭兔
十兔下同
三各有籠
兔幾九上
一何十有

即一除七。九術
得除下以十曰
上三少四上
一上減足置
下五多半三
有除再其十
二下命足五
除五之得頭
上下上四下
二有三十置

2019/1/22

Also: method sixth: put down the ~~the~~ number of heads, ^{below} and put down the number of feet below. Halve the ~~the~~ number of feet. ^{Removing from} ~~Reducing~~ the number of feet ~~by~~ by the number of heads, and ^{removing} ~~reducing~~ from the number of heads by the number of feet, we are done.

即其又
得足術
以曰:
頭上
除置
足頭
以下
置足
除足
頭半

END 31