

⑤

no. of days food lasts $x_i$	6	$x_2$
no. of animals $y_i$	20	$20+10=30$

$\therefore x$  and  $y$  are inversely proportional

$$6 \times 20 = x_2 \times 30$$

$$\Rightarrow x_2 = \frac{6 \times 20}{30}$$

$$\Rightarrow x_2 = 4$$

⑦

no. of boxes $x_i$	25	20
no. of bottles in each box $y_i$	12	$y_2$

$\therefore x$  and  $y$  vary inversely

$$\therefore x_1 y_1 = x_2 y_2$$

$$25 \times 12 = 20 y_2$$

$$\Rightarrow y_2 = \frac{25 \times 12}{20} = 3$$

$$\Rightarrow y_2 = 15$$