



(234141)

()

()

27		1
15		2
20		3
15		4
23		5
100		"

! . () 120 : .1
 4- 9 5 .2
 . 5 .3
 . 4
 . 5
 . 6
 . 7
 / 20%- " / " / .(.8

!

:(27) 1

, . |E|=50 . G=(V,E) (6) .

|V| ,
.G (1

_____ :

_____ :

. G (2

_____ :

_____ :

. G (3

_____ :

_____ :

.G=(V,E) |V|≤B :
() . _____

? . k- " , (n) , (3) .

. n- n : 2n S (4) .
(. :) ? S- n

. k n - ? G (3) .

[Empty rectangular box]

x_i) ? (8) .
(.i -

$$2x_1 + 2x_2 + x_3 + x_4 + x_5 = 30$$

[Empty rectangular box]

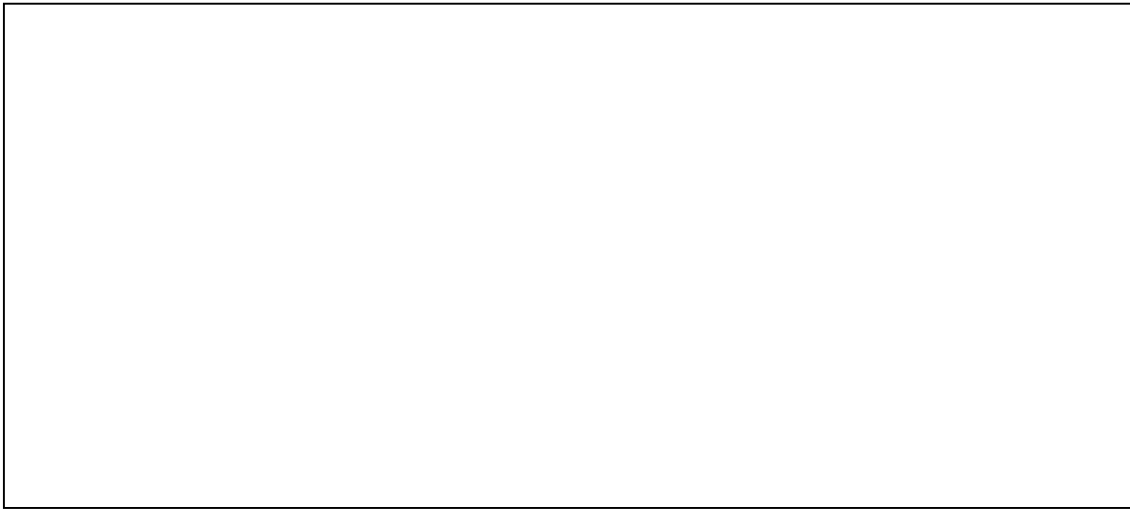
() 18 - (3) .
.9 3 4, 13

[Empty rectangular box]

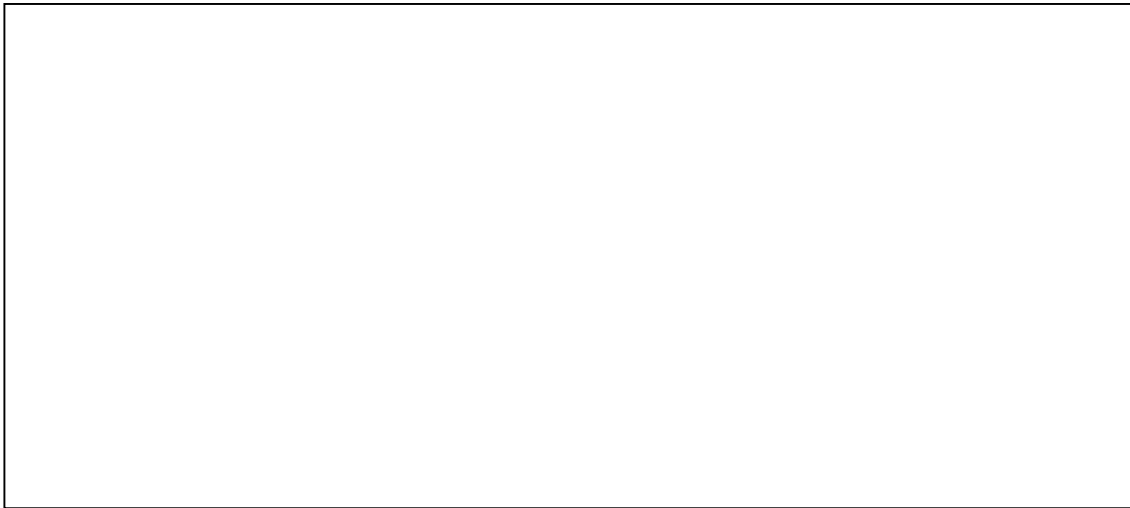
:(15) 2

$$\sum_{r=0}^k (-1)^r \binom{k}{r} \binom{n+(k-r)-1}{n} = \binom{k+(n-k)-1}{n-k}$$

- G - $G = (V, E)$ $(20) 3$ (5) .
 $|V|$ (1
 $|V|$ (2
 $|V|$ (3



$G = (V, E)$ $v - u$ (5) .



- $E_U \subseteq E$.G - $U \subseteq V$ $G = (V, E)$:

$G_U = (U, E_U)$. $x, y \in U$ " $x - y \in E_U$ E

.U " _____

. G . - - $G = (V, E)$ (10) .

" - $G_x = (V_x, E_x)$ $G - x$: _____

- x " $(G_x - x)$ x

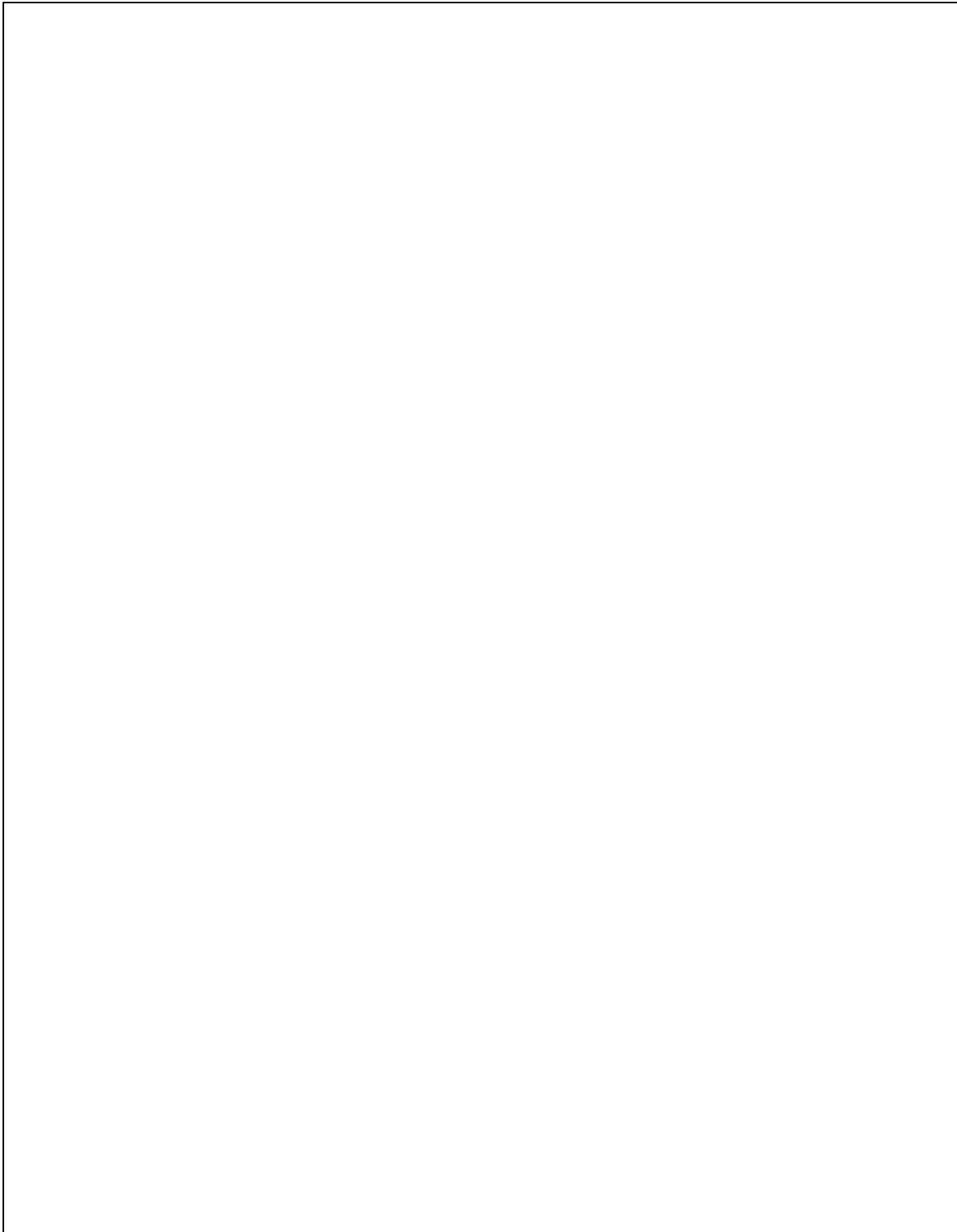
" - G_x

: _____



$$G(n, k) \text{ , } n \leq 3k \text{ , } k - n : (15) 4$$

$$G(n, k) \text{ , } (k - n) \text{ . } \underline{\hspace{2cm}} \text{ } 3$$



"
(' ')

234141

(23) 5
 " " " "
 (n,n) - (0,0) - (5) .
 .0 < i, j < n , (i, j)

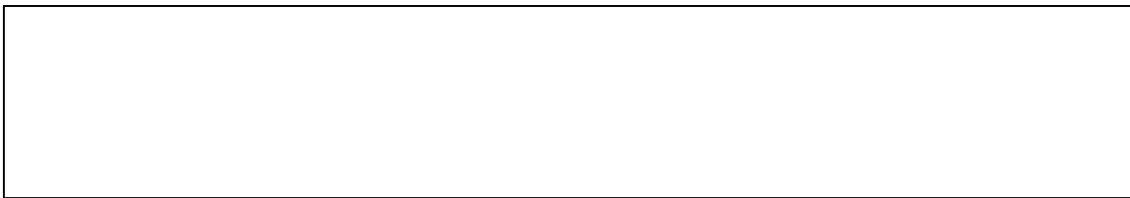


" " (n,n) - (0,0) - (6) .



" " (n,n) - (0,0) - (4) .
 .()

.(i,i)



"
(' ')

234141

-

" "

(7) .
(n,n) - (0,0)



2009 21

"
(' ')

234141

- ; , () .
_____ .(4,4)- (0,0)

