${\bf ClassName:}~{\bf Class\_01.2bp\text{-}31}$ 

BinSize:  $\underline{10} \times \underline{10}$ ReduceSize:  $\underline{10} \times \underline{10}$ 

TypeNum: <u>57</u> Num: <u>80</u> OutS: <u>2600</u> InS: <u>2407</u> Rate: <u>0.926</u> UB: <u>26</u> LB0: <u>26</u> LB: <u>26</u>

LBWithCut:  $\underline{26}$  NodeCut:  $\underline{0}$ 

ExtendedNodeCnt:  $\underline{\mathbf{1}}$ 

GenNodeCnt:  $\underline{\mathbf{1}}$ PrimalNode:  $\underline{\mathbf{0}}$ ColumnCount:  $\underline{\mathbf{26}}$ TotalCutCount:  $\underline{\mathbf{0}}$ RootCutCount:  $\underline{\mathbf{0}}$ LPSolverCnt:  $\underline{\mathbf{1}}$ PricingSolverCnt:  $\underline{\mathbf{0}}$ BranchAndBoundNum:  $\underline{\mathbf{1}}$ 

isOpt:  $\underline{\mathbf{true}}$ 

TimeOnInitSolution: 0.090 sTimeOnPrimal: 0.000 sTimeOnPricing: 0.000 sTimeOnRmp: 0.079 sTotalTime: 0.231 s



 $\mathbf{w}$  =10 , h =10 , x =0 , y =0 , v =100



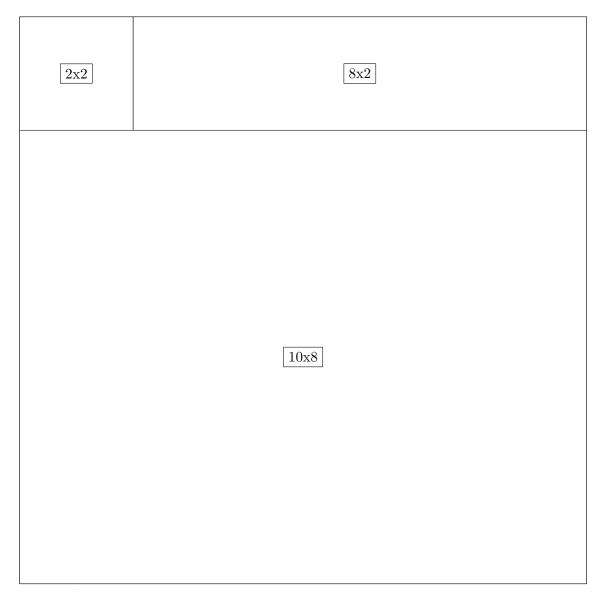
 $\mathbf{w}$  =10 , h =10 , x =0 , y =0 , v =100

3x1	[5x1]	
10	x9	

$$\begin{array}{l} w = & 10 \ , \ h = & 9 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 90 \\ w = & 5 \ , \ h = & 1 \ , \ x = & 5 \ , \ y = & 9 \ , \ v = & 5 \\ w = & 3 \ , \ h = & 1 \ , \ x = & 2 \ , \ y = & 9 \ , \ v = & 3 \end{array}$$



w =9, h =10, x =0, y =0, v =90 w =1, h =10, x =9, y =0, v =10

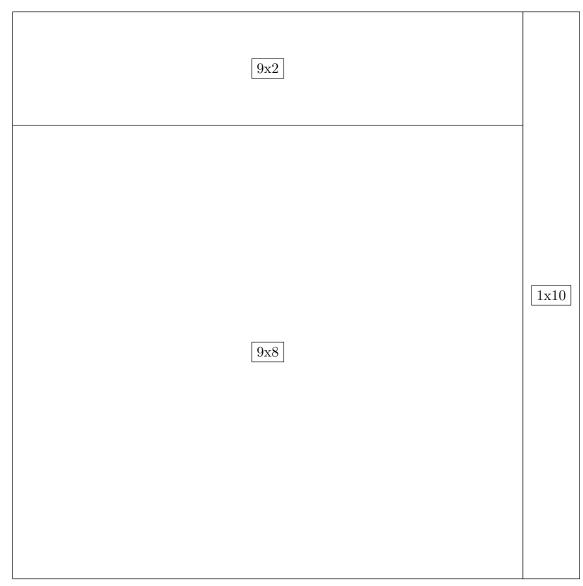


 $\begin{array}{l} w = & 10 \ , \ h = & 8 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 80 \\ w = & 8 \ , \ h = & 2 \ , \ x = & 2 \ , \ y = & 8 \ , \ v = & 16 \\ w = & 2 \ , \ h = & 2 \ , \ x = & 0 \ , \ y = & 8 \ , \ v = & 4 \end{array}$ 

5x2	5x2
	x8

 $\begin{array}{l} w = & 10 \ , \ h = & 8 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 80 \\ w = & 5 \ , \ h = & 2 \ , \ x = & 5 \ , \ y = & 8 \ , \ v = & 10 \\ w = & 5 \ , \ h = & 2 \ , \ x = & 0 \ , \ y = & 8 \ , \ v = & 10 \end{array}$ 



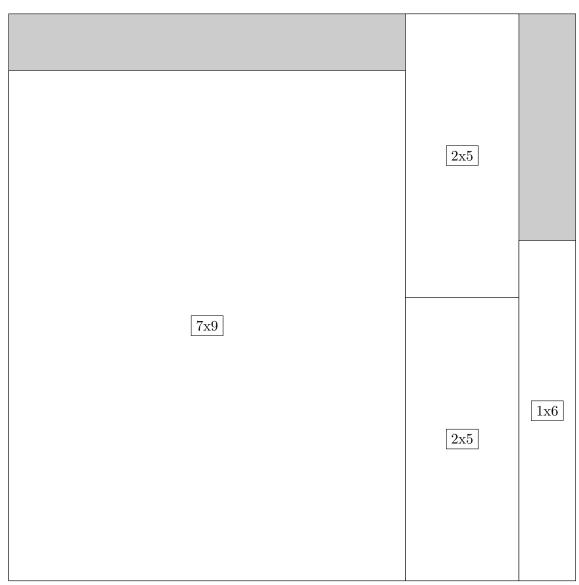


$$\begin{array}{l} w = 9 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 72 \\ w = 9 \ , \ h = 2 \ , \ x = 0 \ , \ y = 8 \ , \ v = 18 \\ w = 1 \ , \ h = 10 \ , \ x = 9 \ , \ y = 0 \ , \ v = 10 \end{array}$$

8x9	2x9

 $\begin{array}{l} w = 8 \ , \, h = 9 \ , \, x = 0 \ , \, y = 0 \ , \, v = 72 \\ w = 2 \ , \, h = 9 \ , \, x = 8 \ , \, y = 0 \ , \, v = 18 \end{array}$ 

7x10	3x10

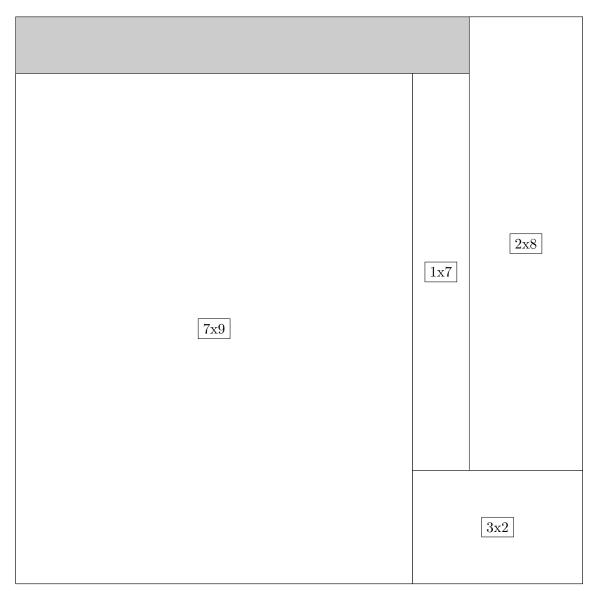


$$\mathbf{w}$$
 =7 , h =9 , x =0 , y =0 , v =63

$$\mathbf{w}$$
 =2 , h =5 , x =7 , y =0 , v =10

$$\mathbf{w}$$
 =2 , h =5 , x =7 , y =5 , v =10

$$\mathbf{w}$$
 =1 , h =6 , x =9 , y =0 , v =6



 $\mathbf{w}$  =7 , h =9 , x =0 , y =0 , v =63  $\mathbf{w}$  =2 , h =8 , x =8 , y =2 , v = 16

 $\mathbf{w}$  =1 , h =7 , x =7 , y =2 , v =7

 $\mathbf{w}$  =3 , h =2 , x =7 , y =0 , v =6

5x2	5x2
7x8	3x8

$$\begin{array}{l} w=7\ ,\, h=8\ ,\, x=0\ ,\, y=0\ ,\, v=56\\ w=3\ ,\, h=8\ ,\, x=7\ ,\, y=0\ ,\, v=24\\ w=5\ ,\, h=2\ ,\, x=5\ ,\, y=8\ ,\, v=10\\ w=5\ ,\, h=2\ ,\, x=0\ ,\, y=8\ ,\, v=10 \end{array}$$

6x9	[4x9]

 $\begin{array}{l} w = 6 \ , \, h = 9 \ , \, x = 0 \ , \, y = 0 \ , \, v = 54 \\ w = 4 \ , \, h = 9 \ , \, x = 6 \ , \, y = 0 \ , \, v = 36 \end{array}$ 

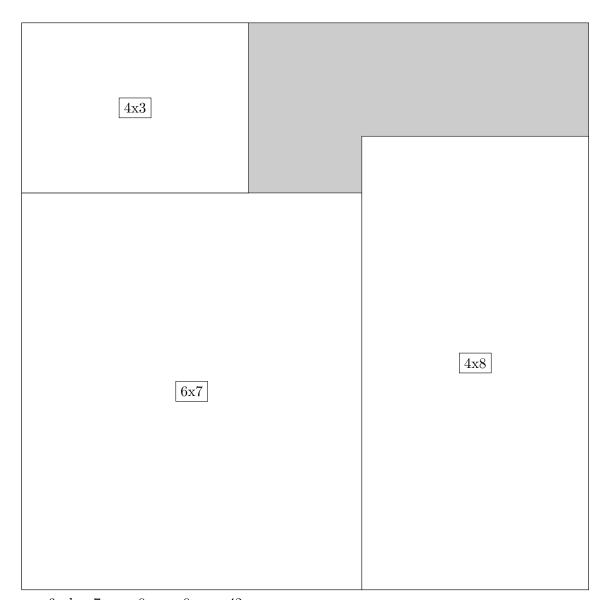
1x4		9x4	
	8x6		2x6

$$\mathbf{w}$$
 =8 , h =6 , x =0 , y =0 , v =48

$$w = 9$$
,  $h = 4$ ,  $x = 1$ ,  $y = 6$ ,  $v = 36$ 

$$\mathbf{w}$$
 =2 , h =6 , x =8 , y =0 , v =12

$$\mathbf{w}$$
 =1 , h =4 , x =0 , y =6 , v =4

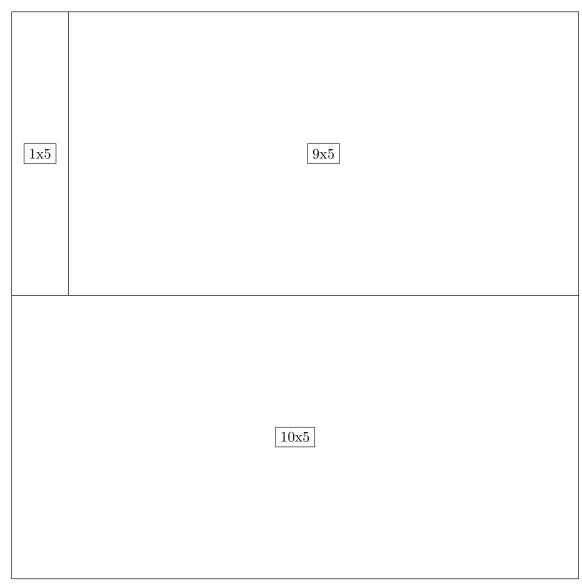


$$\begin{array}{l} w = 6 \ , \ h = 7 \ , \ x = 0 \ , \ y = 0 \ , \ v = 42 \\ w = 4 \ , \ h = 8 \ , \ x = 6 \ , \ y = 0 \ , \ v = 32 \end{array}$$

 $\mathbf{w}$  =4 , h =3 , x =0 , y =7 , v =12

1x2		04	
1x2		9x4	
	6x6		4x6
	A 1 C 26		

$$\begin{array}{l} w=9 \ , \ h=4 \ , \ x=1 \ , \ y=6 \ , \ v=36 \\ w=4 \ , \ h=6 \ , \ x=6 \ , \ y=0 \ , \ v=24 \\ w=6 \ , \ h=6 \ , \ x=0 \ , \ y=0 \ , \ v=36 \\ w=1 \ , \ h=2 \ , \ x=0 \ , \ y=6 \ , \ v=2 \\ w=1 \ , \ h=2 \ , \ x=0 \ , \ y=8 \ , \ v=2 \end{array}$$



$$\begin{array}{l} w = \! 10 \ , \ h = \! 5 \ , \ x = \! 0 \ , \ y = \! 0 \ , \ v = \! 50 \\ w = \! 9 \ , \ h = \! 5 \ , \ x = \! 1 \ , \ y = \! 5 \ , \ v = \! 45 \\ w = \! 1 \ , \ h = \! 5 \ , \ x = \! 0 \ , \ y = \! 5 \ , \ v = \! 5 \end{array}$$

	3x3	1x6	2x6	2x6
5x7			5x4	

w = 5, h = 7, x = 0, y = 0, v = 35

 $\mathbf{w}$  =5 , h =4 , x =5 , y =0 , v =20

 $\mathbf{w}$  =2 , h =6 , x =8 , y =4 , v =12

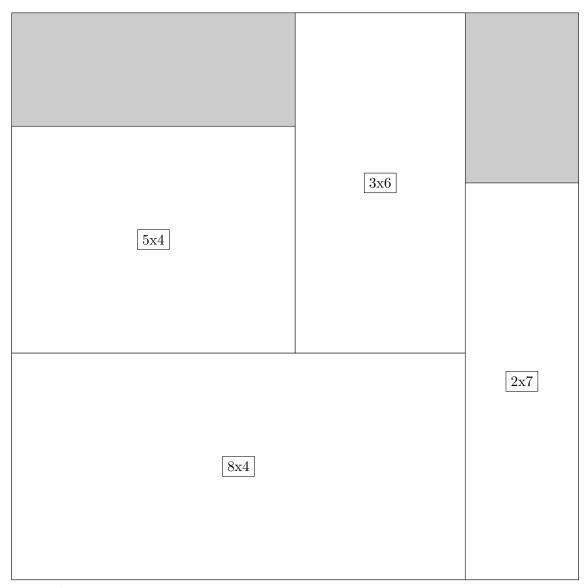
 $\mathbf{w}$  =2 , h =6 , x =6 , y =4 , v =12

w = 3, h = 3, x = 2, y = 7, v = 9

 $\mathbf{w}$  =1 , h =6 , x =5 , y =4 , v =6

8x3		
5x7		5x7

 $\begin{array}{l} w = 5 \ , \ h = 7 \ , \ x = 0 \ , \ y = 0 \ , \ v = 35 \\ w = 5 \ , \ h = 7 \ , \ x = 5 \ , \ y = 0 \ , \ v = 35 \\ w = 8 \ , \ h = 3 \ , \ x = 2 \ , \ y = 7 \ , \ v = 24 \end{array}$ 



 $\le =8$  , h =4 , x =0 , y =0 , v =32

 $\mathbf{w}$  =5 , h =4 , x =0 , y =4 , v =20

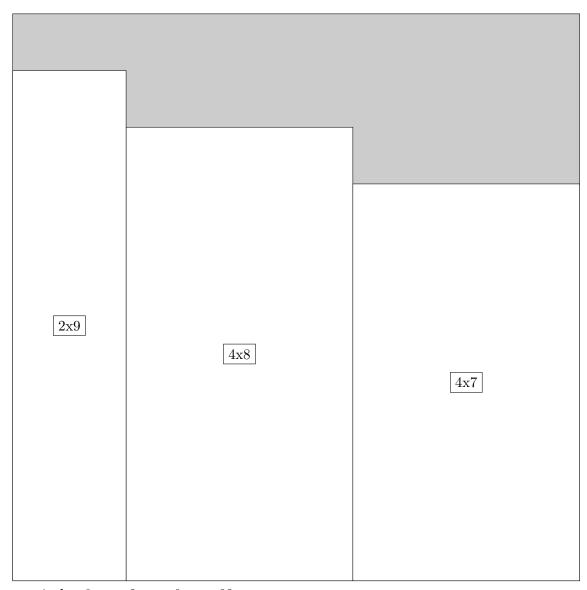
 $\mathbf{w}$  =3 , h =6 , x =5 , y =4 , v = 18

 $\mathbf{w}$  =2 , h =7 , x =8 , y =0 , v = 14

5x5	5x5
6x5	4x5

$$\begin{array}{l} w = 6 \ , \ h = 5 \ , \ x = 0 \ , \ y = 0 \ , \ v = 30 \\ w = 5 \ , \ h = 5 \ , \ x = 5 \ , \ y = 5 \ , \ v = 25 \\ w = 5 \ , \ h = 5 \ , \ x = 0 \ , \ y = 5 \ , \ v = 25 \end{array}$$

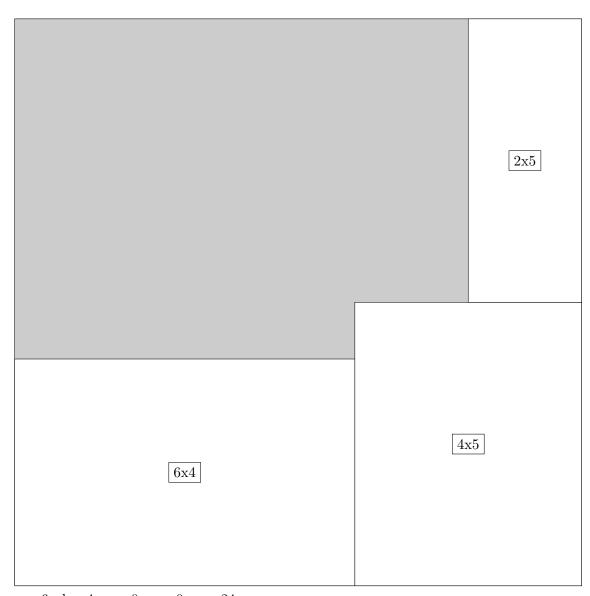
 $\mathbf{w}=\!\!4$  ,  $\mathbf{h}=\!\!5$  ,  $\mathbf{x}=\!\!6$  ,  $\mathbf{y}=\!\!0$  ,  $\mathbf{v}=\!\!20$ 



 $\begin{array}{l} w = \!\! 4 \ , \ h = \!\! 8 \ , \ x = \!\! 2 \ , \ y = \!\! 0 \ , \ v = \!\! 32 \\ w = \!\! 4 \ , \ h = \!\! 7 \ , \ x = \!\! 6 \ , \ y = \!\! 0 \ , \ v = \!\! 28 \\ w = \!\! 2 \ , \ h = \!\! 9 \ , \ x = \!\! 0 \ , \ y = \!\! 0 \ , \ v = \!\! 18 \end{array}$ 

7x4	
6x4	4x4

 $\begin{array}{l} w = 7 \ , \ h = 4 \ , \ x = 0 \ , \ y = 4 \ , \ v = 28 \\ w = 6 \ , \ h = 4 \ , \ x = 0 \ , \ y = 0 \ , \ v = 24 \\ w = 4 \ , \ h = 4 \ , \ x = 6 \ , \ y = 0 \ , \ v = 16 \end{array}$ 



$$\begin{array}{l} w = 6 \ , \ h = \! 4 \ , \ x = \! 0 \ , \ y = \! 0 \ , \ v = \! 24 \\ w = \! 4 \ , \ h = \! 5 \ , \ x = \! 6 \ , \ y = \! 0 \ , \ v = \! 20 \end{array}$$

$$w$$
 =2 ,  $h$  =5 ,  $x$  =8 ,  $y$  =5 ,  $v$  =10

5x9	$\boxed{4\mathrm{x}9}$	1x9

 $\begin{array}{l} w = 5 \ , \ h = 9 \ , \ x = 0 \ , \ y = 0 \ , \ v = 45 \\ w = 4 \ , \ h = 9 \ , \ x = 5 \ , \ y = 0 \ , \ v = 36 \end{array}$ 

w = 1 , h = 9 , x = 9 , y = 0 , v = 9