$ClassName: \ Class\_01.2bp\text{-}48$ 

 $\begin{array}{ll} \text{BinSize: } \underline{\mathbf{10} \times \mathbf{10}} \\ \text{ReduceSize: } \underline{\mathbf{10} \times \mathbf{10}} \end{array}$ 

TypeNum: <u>67</u> Num: <u>100</u> OutS: <u>3100</u> InS: <u>2986</u> Rate: <u>0.963</u> UB: <u>31</u>

UB: <u>31</u> LB0: <u>31</u> LB: **31** 

LBWithCut:  $\underline{\bf 31}$ NodeCut:  $\underline{\bf 0}$ 

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

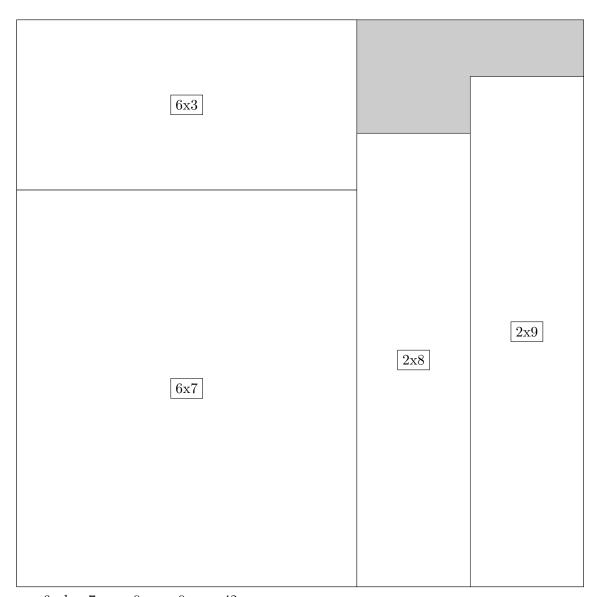
GenNodeCnt:  $\underline{\mathbf{1}}$ PrimalNode:  $\underline{\mathbf{0}}$ ColumnCount:  $\underline{\mathbf{31}}$ TotalCutCount:  $\underline{\mathbf{0}}$ RootCutCount:  $\underline{\mathbf{0}}$ LPSolverCnt:  $\underline{\mathbf{1}}$ PricingSolverCnt:  $\underline{\mathbf{0}}$ BranchAndBoundNum:  $\underline{\mathbf{1}}$ 

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

TimeOnInitSolution: 0.460 sTimeOnPrimal: 0.000 sTimeOnPricing: 0.000 sTimeOnRmp: 0.077 sTotalTime: 0.603 s



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

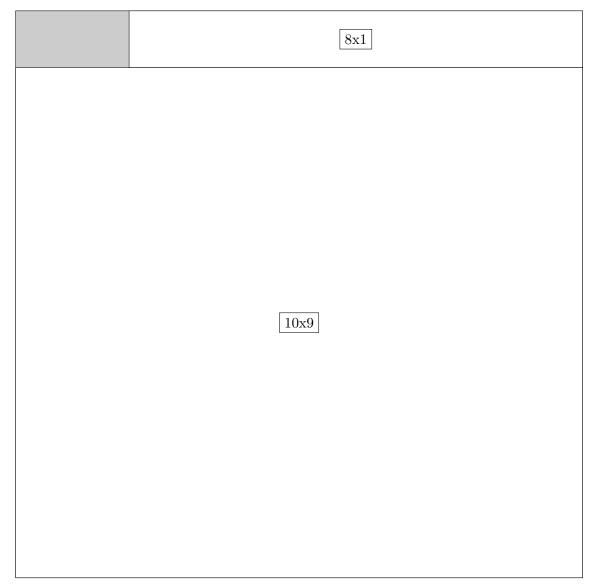


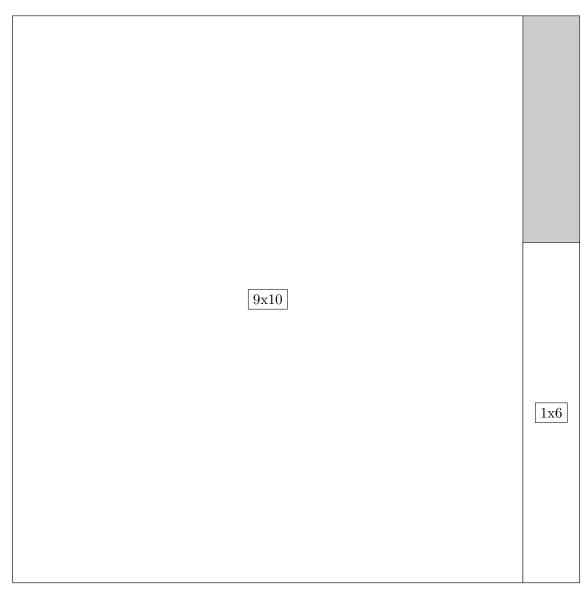
$$\begin{array}{l} w = 6 \ , \ h = 7 \ , \ x = 0 \ , \ y = 0 \ , \ v = 42 \\ w = 6 \ , \ h = 3 \ , \ x = 0 \ , \ y = 7 \ , \ v = 18 \end{array}$$

$$w = 2$$
,  $h = 9$ ,  $x = 8$ ,  $y = 0$ ,  $v = 18$ 

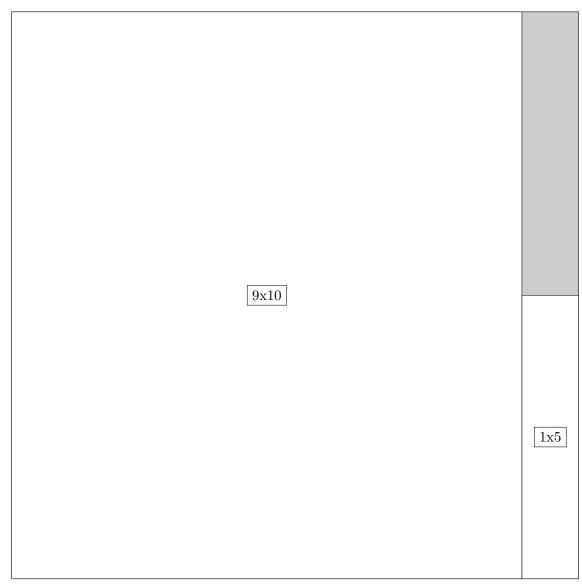
$$w = 2$$
,  $h = 8$ ,  $x = 6$ ,  $y = 0$ ,  $v = 16$ 



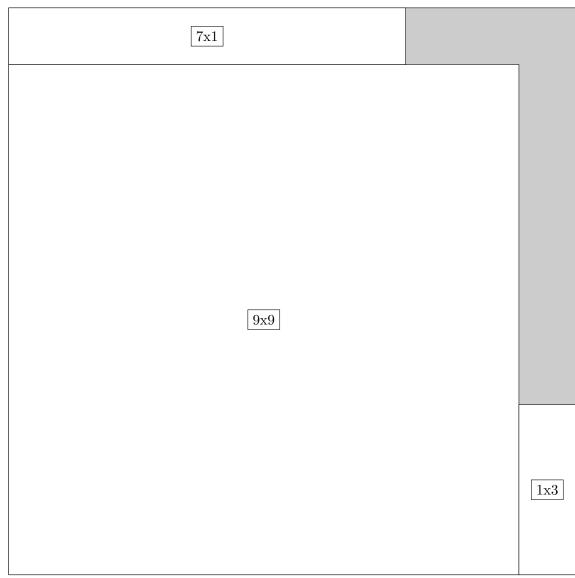




 $\begin{array}{l} w = 9 \ , \ h = \!\! 10 \ , \ x = \!\! 0 \ , \ y = \!\! 0 \ , \ v = \!\! 90 \\ w = \!\! 1 \ , \ h = \!\! 6 \ , \ x = \!\! 9 \ , \ y = \!\! 0 \ , \ v = \!\! 6 \end{array}$ 



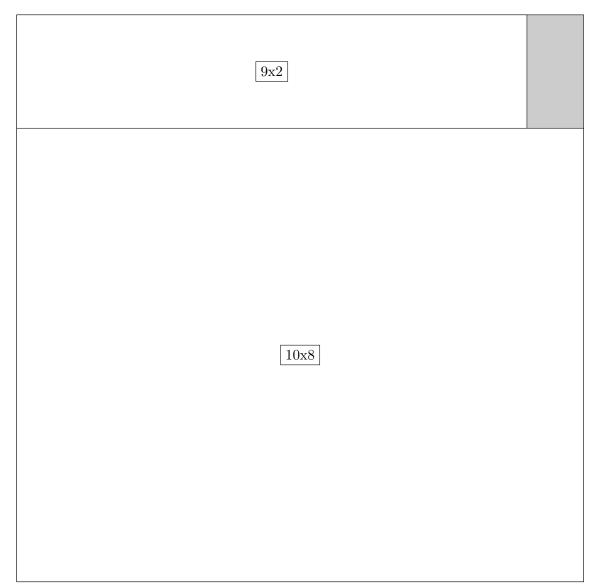
 $\begin{array}{l} w = 9 \ , \ h = \! 10 \ , \ x = \! 0 \ , \ y = \! 0 \ , \ v = \! 90 \\ w = \! 1 \ , \ h = \! 5 \ , \ x = \! 9 \ , \ y = \! 0 \ , \ v = \! 5 \end{array}$ 



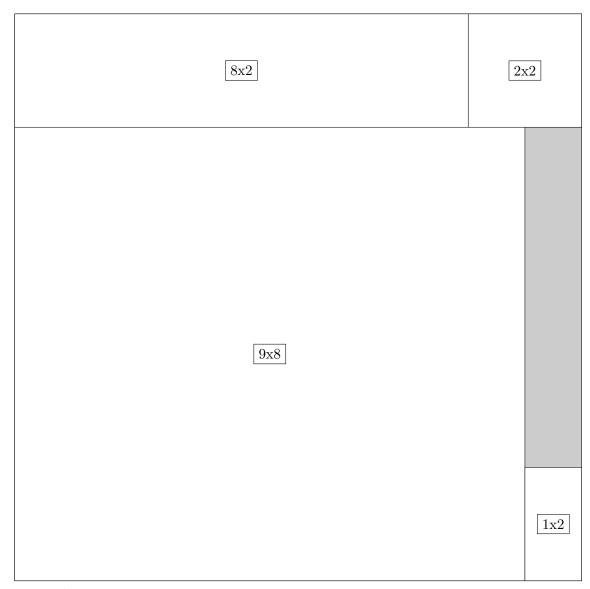
$$\le =9$$
 , h =9 , x =0 , y =0 , v =81

$$\mathbf{w}$$
 =7 , h =1 , x =0 , y =9 , v =7

$$\mathbf{w}$$
 =1 , h =3 , x =9 , y =0 , v =3



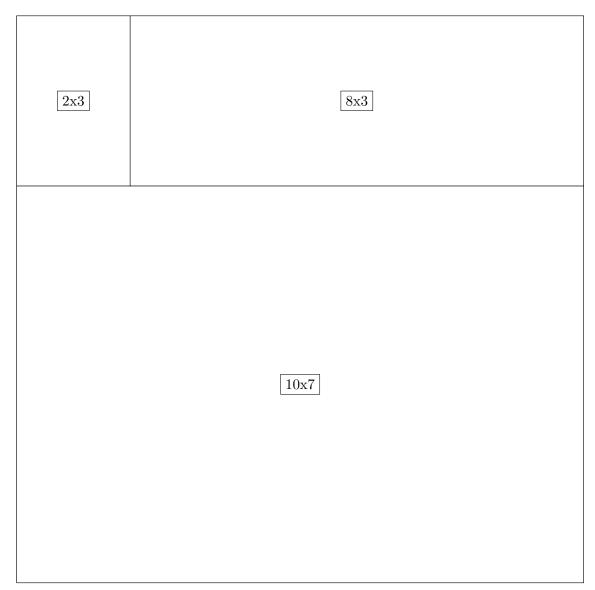




$$\begin{array}{l} w = 9 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 72 \\ w = 8 \ , \ h = 2 \ , \ x = 0 \ , \ y = 8 \ , \ v = 16 \end{array}$$

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

$$\mathbf{w}$$
 =1 , h =2 , x =9 , y =0 , v =2



$$\begin{array}{l} w = & 10 \ , \ h = & 7 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 70 \\ w = & 8 \ , \ h = & 3 \ , \ x = & 2 \ , \ y = & 7 \ , \ v = & 24 \\ w = & 2 \ , \ h = & 3 \ , \ x = & 0 \ , \ y = & 7 \ , \ v = & 6 \end{array}$$

7x10	3x10

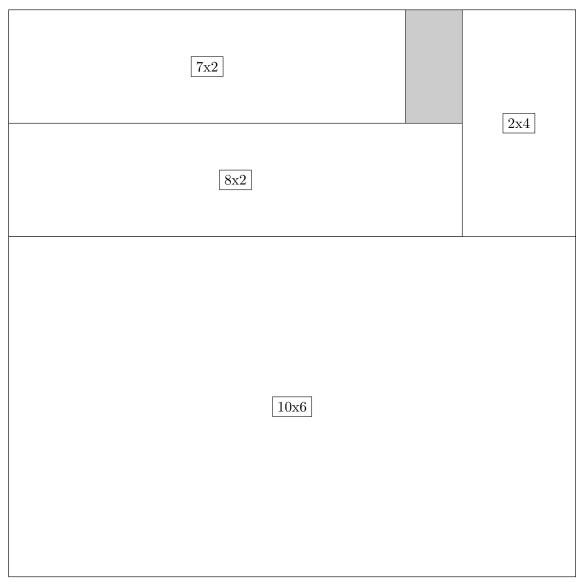
4x3	6x3	
	9x7	
		1x1

$$\begin{array}{l} w = 9 \ , \ h = 7 \ , \ x = 0 \ , \ y = 0 \ , \ v = 63 \\ w = 6 \ , \ h = 3 \ , \ x = 4 \ , \ y = 7 \ , \ v = 18 \\ w = 4 \ , \ h = 3 \ , \ x = 0 \ , \ y = 7 \ , \ v = 12 \\ w = 1 \ , \ h = 1 \ , \ x = 9 \ , \ y = 0 \ , \ v = 1 \end{array}$$

	8x1	
[7x9]		3x9

 $\begin{array}{l} w = 7 \ , \ h = 9 \ , \ x = 0 \ , \ y = 0 \ , \ v = 63 \\ w = 3 \ , \ h = 9 \ , \ x = 7 \ , \ y = 0 \ , \ v = 27 \end{array}$ 

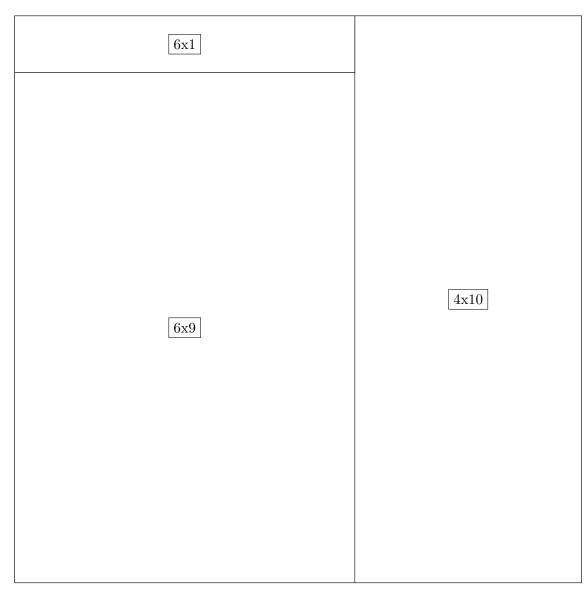
w=8 , h=1 , x=2 , y=9 , v=8



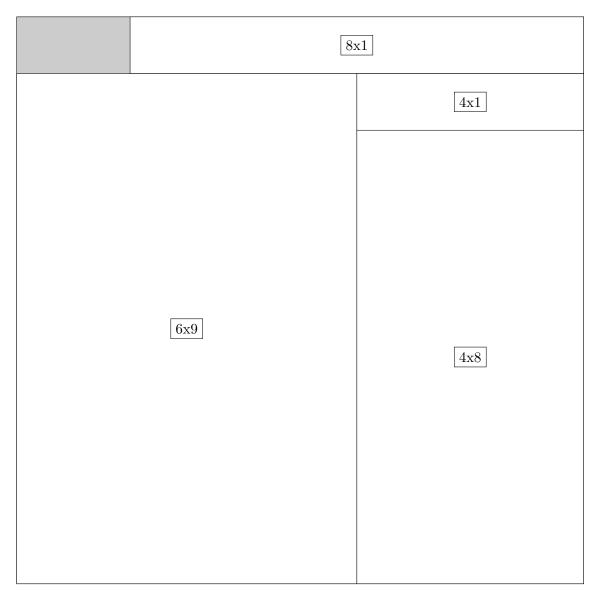
$$\begin{array}{l} w=7\ ,\ h=2\ ,\ x=0\ ,\ y=8\ ,\ v=14\\ w=8\ ,\ h=2\ ,\ x=0\ ,\ y=6\ ,\ v=16\\ w=10\ ,\ h=6\ ,\ x=0\ ,\ y=0\ ,\ v=60\\ w=2\ ,\ h=4\ ,\ x=8\ ,\ y=6\ ,\ v=8 \end{array}$$

5x4	$5\mathrm{x}4$
9x6	

$$\begin{array}{l} w = 9 \ , \ h = 6 \ , \ x = 0 \ , \ y = 0 \ , \ v = 54 \\ w = 5 \ , \ h = 4 \ , \ x = 0 \ , \ y = 6 \ , \ v = 20 \\ w = 5 \ , \ h = 4 \ , \ x = 5 \ , \ y = 6 \ , \ v = 20 \end{array}$$



 $\begin{array}{l} w = 6 \ , \ h = 9 \ , \ x = 0 \ , \ y = 0 \ , \ v = 54 \\ w = 4 \ , \ h = 10 \ , \ x = 6 \ , \ y = 0 \ , \ v = 40 \\ w = 6 \ , \ h = 1 \ , \ x = 0 \ , \ y = 9 \ , \ v = 6 \end{array}$ 

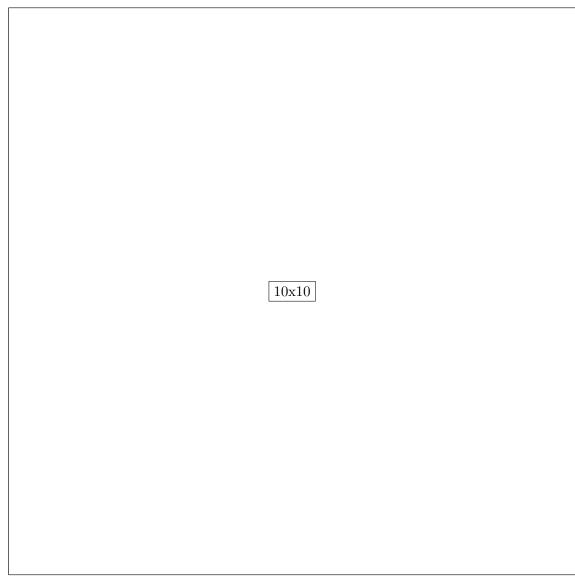


$$\mathbf{w}$$
 =6 ,  $\mathbf{h}$  =9 ,  $\mathbf{x}$  =0 ,  $\mathbf{y}$  =0 ,  $\mathbf{v}$  =54

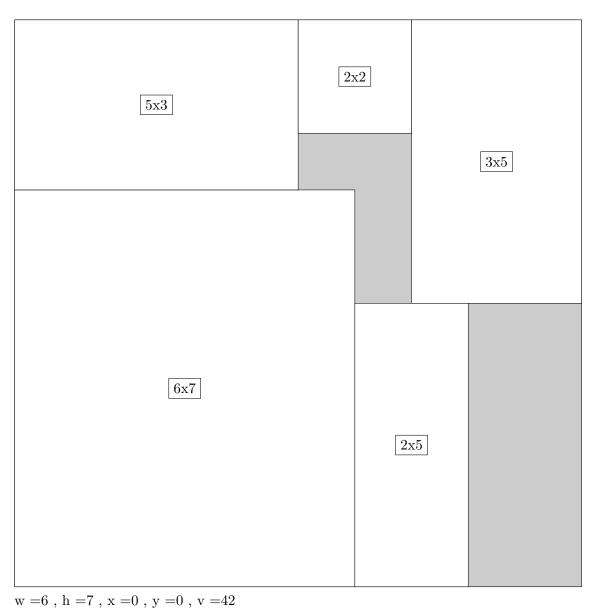
$$\mathbf{w}$$
 =4 , h =8 , x =6 , y =0 , v =32

$$\mathbf{w}$$
 =8 , h =1 , x =2 , y =9 , v =8

$$\mathbf{w}=\!\!4$$
 ,  $\mathbf{h}=\!\!1$  ,  $\mathbf{x}=\!\!6$  ,  $\mathbf{y}=\!\!8$  ,  $\mathbf{v}=\!\!4$ 



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

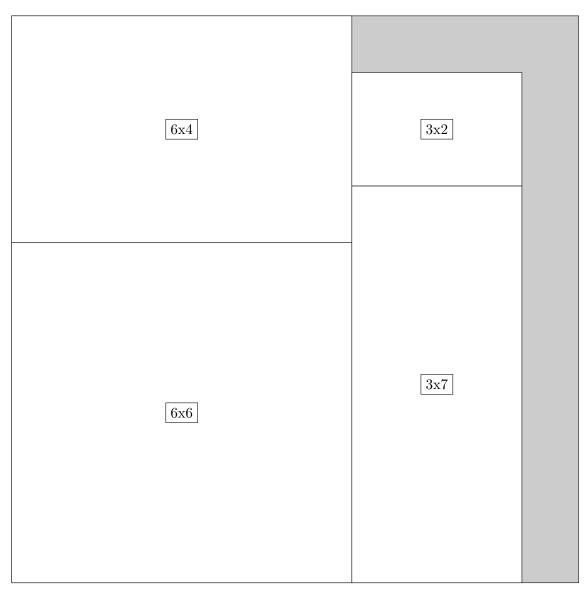


$$\mathbf{w}$$
 =2 , h =5 , x =6 , y =0 , v =10

$$w = 2$$
,  $h = 2$ ,  $x = 5$ ,  $y = 8$ ,  $v = 4$ 

3x4		7x4
62	<b>c</b> 6	4x6

 $\begin{array}{l} w = 4 \ , \ h = 6 \ , \ x = 6 \ , \ y = 0 \ , \ v = 24 \\ w = 6 \ , \ h = 6 \ , \ x = 0 \ , \ y = 0 \ , \ v = 36 \\ w = 7 \ , \ h = 4 \ , \ x = 3 \ , \ y = 6 \ , \ v = 28 \\ w = 3 \ , \ h = 4 \ , \ x = 0 \ , \ y = 6 \ , \ v = 12 \end{array}$ 

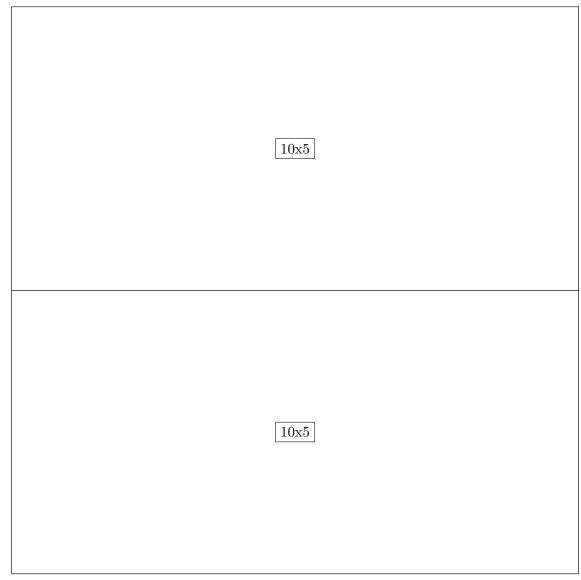


$$w = 6$$
,  $h = 6$ ,  $x = 0$ ,  $y = 0$ ,  $v = 36$ 

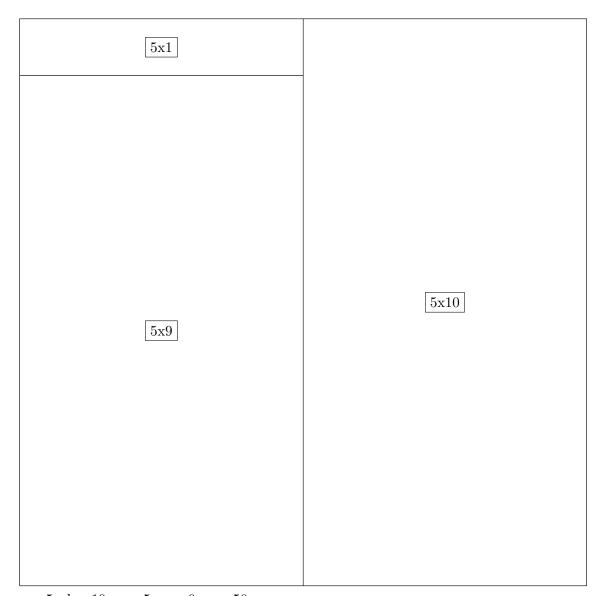
$$\mathbf{w}$$
 =6 , h =4 , x =0 , y =6 , v =24

$$w = 3$$
 ,  $h = 7$  ,  $x = 6$  ,  $y = 0$  ,  $v = 21$ 

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

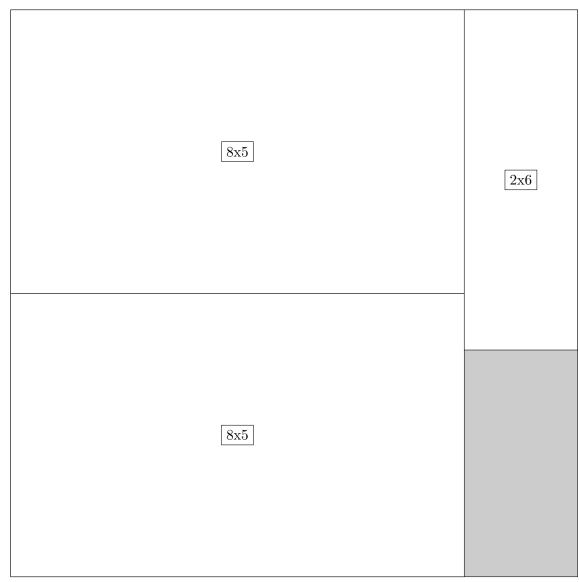


$5\mathrm{x}10$	$5\mathrm{x}10$



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

 $\mathbf{w}$  =5 , h =1 , x =0 , y =9 , v =5



$$\mathbf{w}$$
 =8 , h =5 , x =0 , y =0 , v =40

$$\mathbf{w}$$
 =8 , h =5 , x =0 , y =5 , v =40

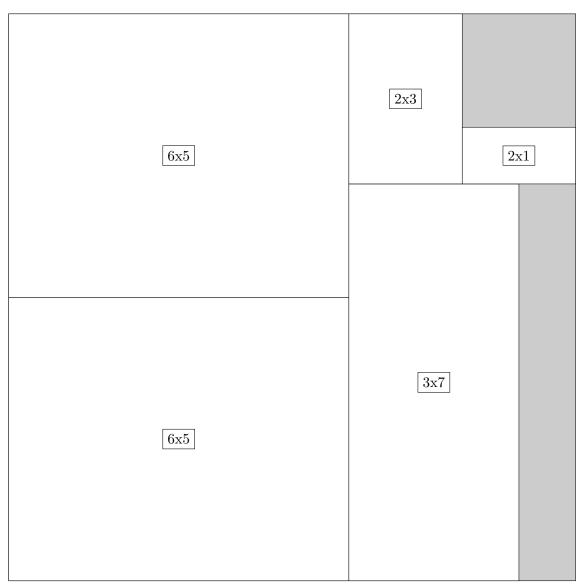
$$\mathbf{w}$$
 =2 , h =6 , x =8 , y =4 , v =12

9x2	
	5x1
5x8	5x7
	OAT

$$\begin{array}{l} w = 5 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 40 \\ w = 5 \ , \ h = 7 \ , \ x = 5 \ , \ y = 0 \ , \ v = 35 \end{array}$$

$$w = 9$$
,  $h = 2$ ,  $x = 0$ ,  $y = 8$ ,  $v = 18$ 

$$\mathbf{w}$$
 =5 , h =1 , x =5 , y =7 , v =5



$$\mathbf{w}$$
 =6 , h =5 , x =0 , y =0 , v =30

$$\mathbf{w}$$
 =6 , h =5 , x =0 , y =5 , v =30

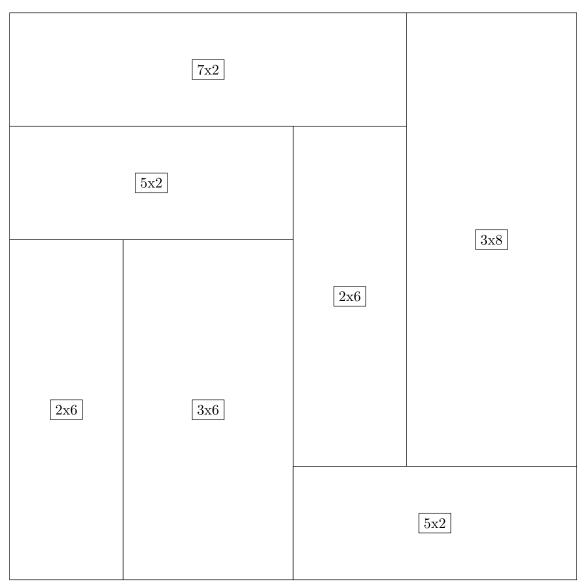
$$\mathbf{w}$$
 =3 , h =7 , x =6 , y =0 , v =  
21

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

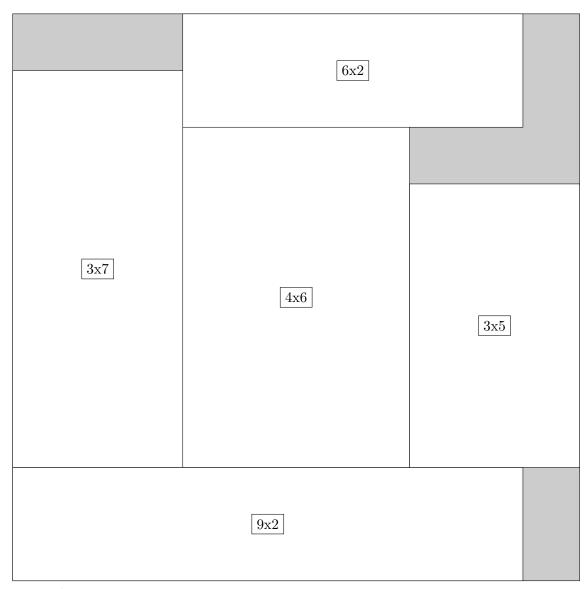
$$w = 2$$
,  $h = 1$ ,  $x = 8$ ,  $y = 7$ ,  $v = 2$ 

3x4	6x4
	5x2
5x6	5x4

$$\begin{array}{l} w=6\ ,\, h=4\ ,\, x=4\ ,\, y=6\ ,\, v=24\\ w=5\ ,\, h=4\ ,\, x=5\ ,\, y=0\ ,\, v=20\\ w=3\ ,\, h=4\ ,\, x=0\ ,\, y=6\ ,\, v=12\\ w=5\ ,\, h=6\ ,\, x=0\ ,\, y=0\ ,\, v=30\\ w=5\ ,\, h=2\ ,\, x=5\ ,\, y=4\ ,\, v=10 \end{array}$$



 $\begin{array}{l} w=2\ ,\ h=6\ ,\ x=5\ ,\ y=2\ ,\ v=12\\ w=3\ ,\ h=6\ ,\ x=2\ ,\ y=0\ ,\ v=18\\ w=7\ ,\ h=2\ ,\ x=0\ ,\ y=8\ ,\ v=14\\ w=3\ ,\ h=8\ ,\ x=7\ ,\ y=2\ ,\ v=24\\ w=2\ ,\ h=6\ ,\ x=0\ ,\ y=0\ ,\ v=12\\ w=5\ ,\ h=2\ ,\ x=5\ ,\ y=0\ ,\ v=10\\ w=5\ ,\ h=2\ ,\ x=0\ ,\ y=6\ ,\ v=10\\ \end{array}$ 



$$\mathbf{w}$$
 =9 , h =2 , x =0 , y =0 , v =18

$$\mathbf{w}$$
 =3 , h =7 , x =0 , y =2 , v =21

$$\mathbf{w}$$
 =4 , h =6 , x =3 , y =2 , v =24

$$\mathbf{w}$$
 =3 , h =5 , x =7 , y =2 , v =  
15

$$w = 6$$
,  $h = 2$ ,  $x = 3$ ,  $y = 8$ ,  $v = 12$