$ClassName: \ Class_01.2bp\text{-}43$

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

TypeNum: <u>65</u> Num: <u>100</u> OutS: <u>3000</u> InS: <u>2881</u> Rate: <u>0.960</u> UB: <u>30</u> LB0: <u>30</u> LB: <u>30</u>

LBWithCut: $\underline{\mathbf{30}}$ NodeCut: $\underline{\mathbf{0}}$

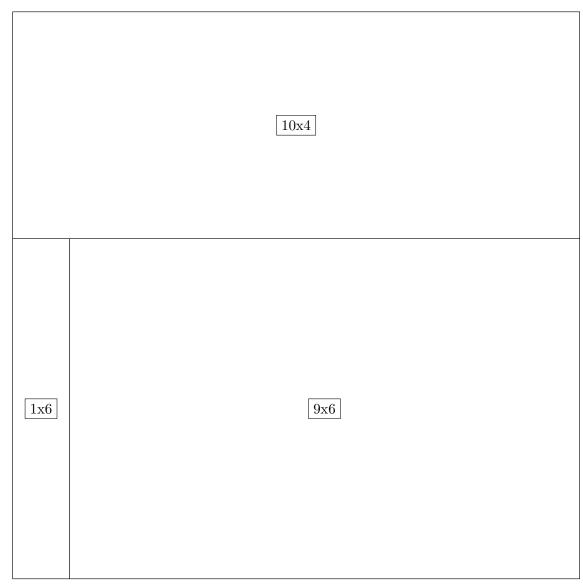
ExtendedNodeCnt: $\underline{\mathbf{1}}$

GenNodeCnt: $\underline{\mathbf{1}}$ PrimalNode: $\underline{\mathbf{0}}$ ColumnCount: $\underline{\mathbf{30}}$ 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: $\underline{600.000 \text{ s}}$

TimeOnPrimal: 0.000 sTimeOnPricing: 0.000 sTimeOnRmp: 0.078 sTotalTime: 600.328 s



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

2x4	$8\mathrm{x}5$
2x4	8x5

$$\begin{array}{l} w = 8 \ , \, h = \! 5 \ , \, x = \! 2 \ , \, y = \! 0 \ , \, v = \! 40 \\ w = \! 2 \ , \, h = \! 4 \ , \, x = \! 0 \ , \, y = \! 0 \ , \, v = \! 8 \\ w = \! 8 \ , \, h = \! 5 \ , \, x = \! 2 \ , \, y = \! 5 \ , \, v = \! 40 \end{array}$$

 \mathbf{w} =2 , h =4 , x =0 , y =5 , v =8

4x3		3x5	3x5
	1x1		
4x7	1x4		5x5

w = 5, h = 5, x = 5, y = 0, v = 25

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

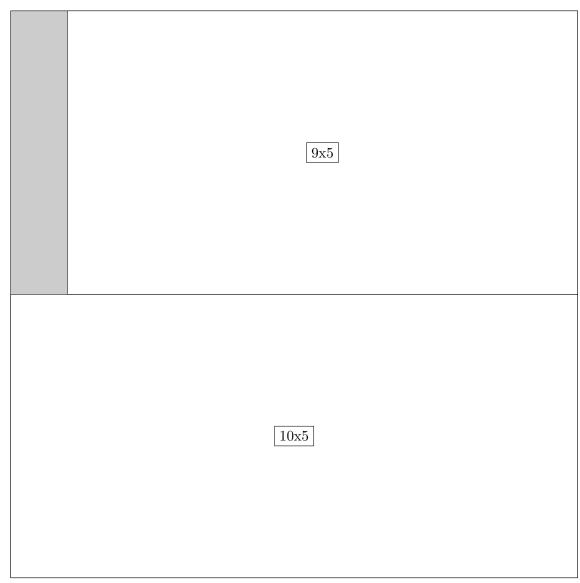
w = 1, h = 1, x = 4, y = 4, v = 1

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

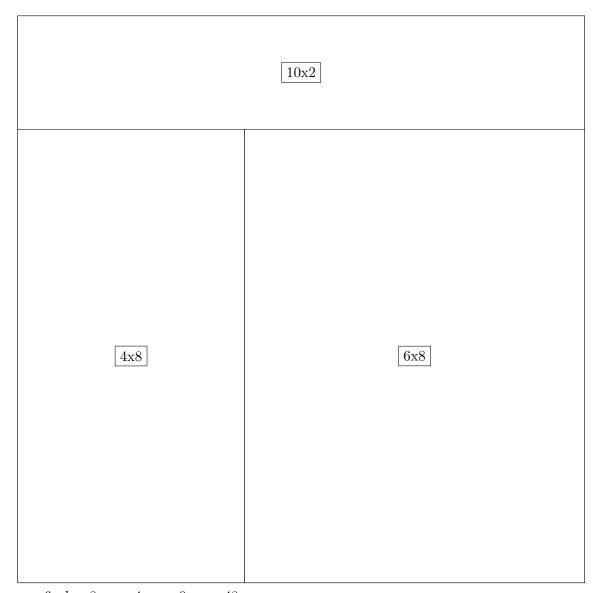
w = 3, h = 5, x = 4, y = 5, v = 15

 \mathbf{w} =4 , h =7 , x =0 , y =0 , v =28

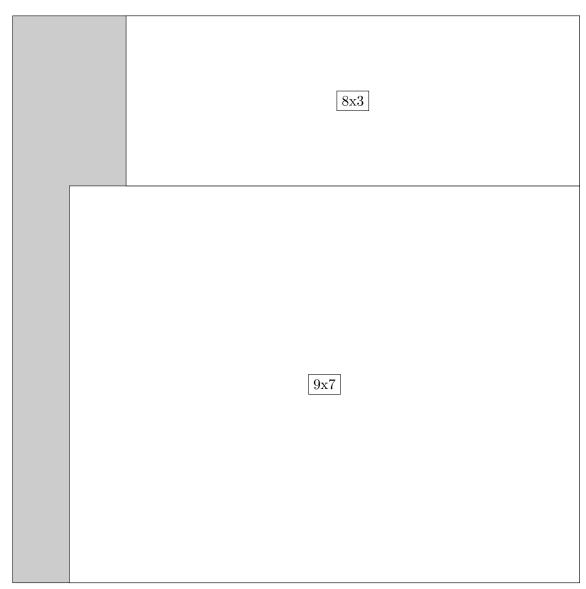
w = 4, h = 3, x = 0, y = 7, v = 12



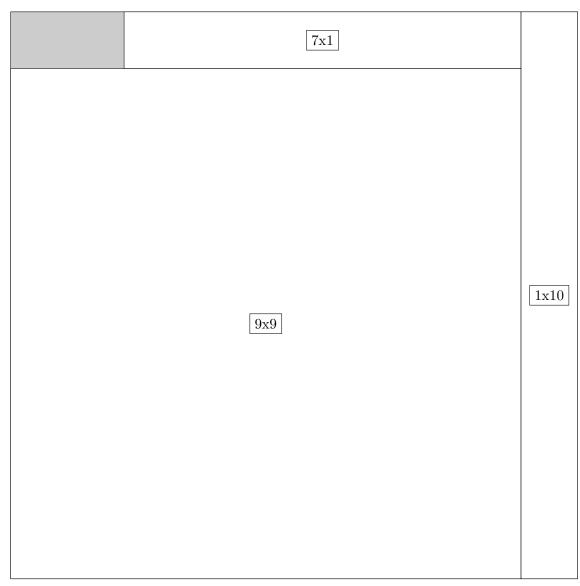
$$\begin{array}{l} w = & 10 \ , \ h = & 5 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 50 \\ w = & 9 \ , \ h = & 5 \ , \ x = & 1 \ , \ y = & 5 \ , \ v = & 45 \end{array}$$



$$\begin{array}{l} w = 6 \ , \ h = 8 \ , \ x = 4 \ , \ y = 0 \ , \ v = 48 \\ w = 4 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 32 \\ w = 10 \ , \ h = 2 \ , \ x = 0 \ , \ y = 8 \ , \ v = 20 \end{array}$$



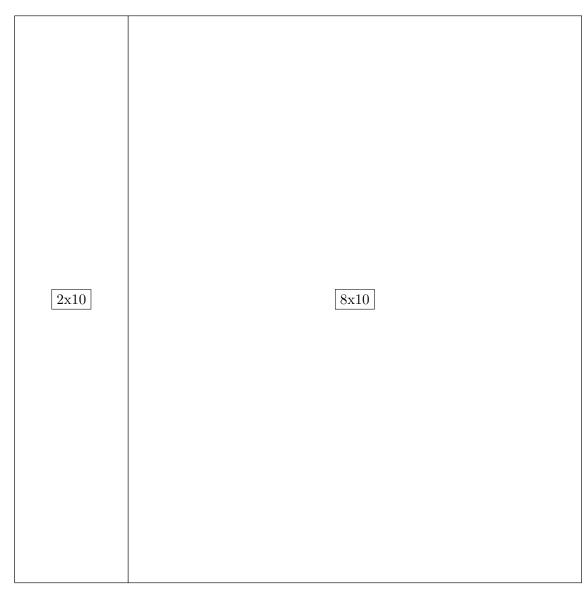
$$\begin{array}{c} w = 9 \ , \ h = 7 \ , \ x = 1 \ , \ y = 0 \ , \ v = 63 \\ w = 8 \ , \ h = 3 \ , \ x = 2 \ , \ y = 7 \ , \ v = 24 \end{array}$$

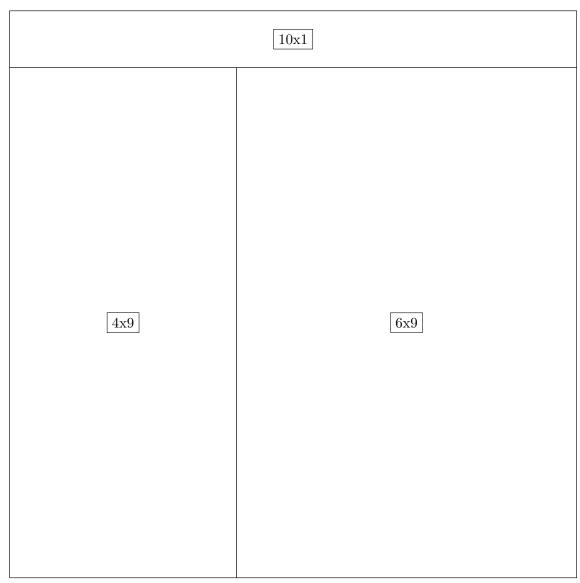


w=1 , h =10 , x =9 , y =0 , v =10

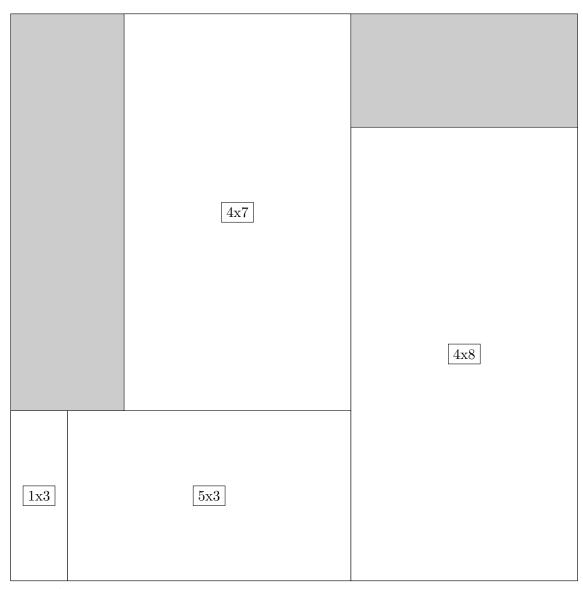
 \mathbf{w} =9 , h =9 , x =0 , y =0 , v =81

 \mathbf{w} =7 , \mathbf{h} =1 , \mathbf{x} =2 , \mathbf{y} =9 , \mathbf{v} =7

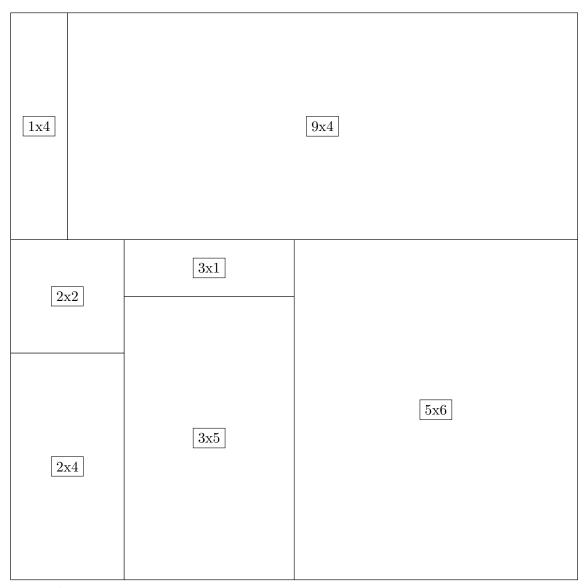




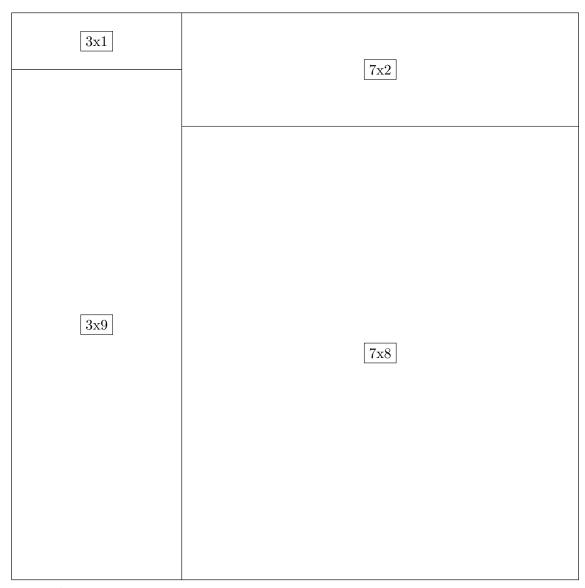
 $\begin{array}{l} w = 6 \ , \ h = 9 \ , \ x = 4 \ , \ y = 0 \ , \ v = 54 \\ w = 4 \ , \ h = 9 \ , \ x = 0 \ , \ y = 0 \ , \ v = 36 \\ w = 10 \ , \ h = 1 \ , \ x = 0 \ , \ y = 9 \ , \ v = 10 \end{array}$



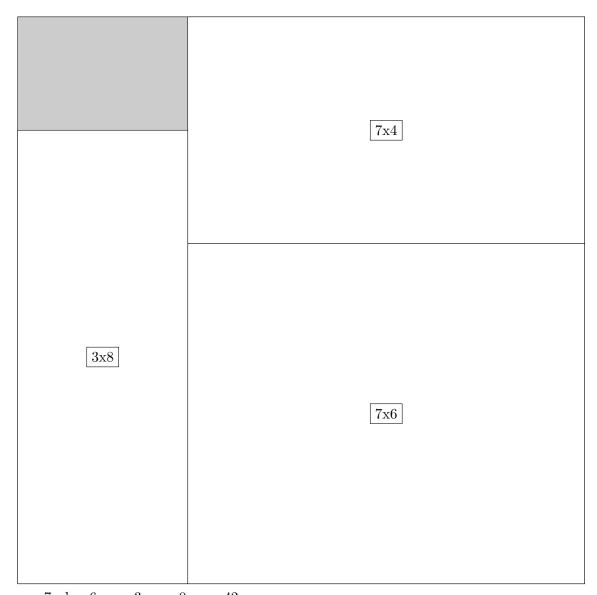
 $\begin{array}{l} w = 4 \ , \ h = 8 \ , \ x = 6 \ , \ y = 0 \ , \ v = 32 \\ w = 5 \ , \ h = 3 \ , \ x = 1 \ , \ y = 0 \ , \ v = 15 \\ w = 1 \ , \ h = 3 \ , \ x = 0 \ , \ y = 0 \ , \ v = 3 \\ w = 4 \ , \ h = 7 \ , \ x = 2 \ , \ y = 3 \ , \ v = 28 \end{array}$



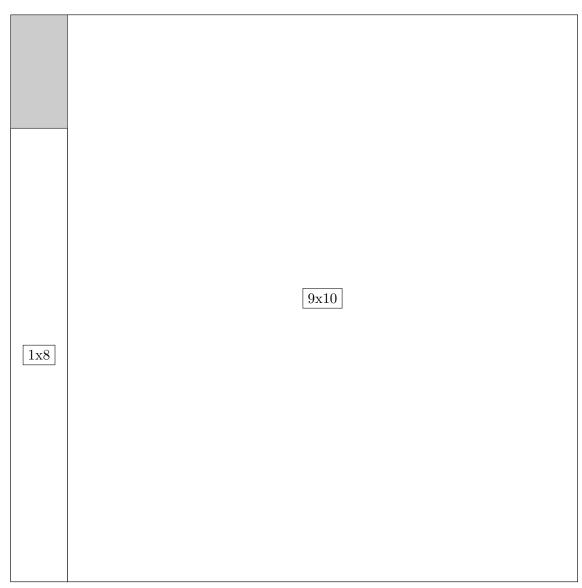
$$\begin{array}{l} w = 5 \ , \ h = 6 \ , \ x = 5 \ , \ y = 0 \ , \ v = 30 \\ w = 3 \ , \ h = 5 \ , \ x = 2 \ , \ y = 0 \ , \ v = 15 \\ w = 3 \ , \ h = 1 \ , \ x = 2 \ , \ y = 5 \ , \ v = 3 \\ w = 2 \ , \ h = 4 \ , \ x = 0 \ , \ y = 0 \ , \ v = 8 \\ w = 2 \ , \ h = 2 \ , \ x = 0 \ , \ y = 4 \ , \ v = 4 \\ w = 9 \ , \ h = 4 \ , \ x = 1 \ , \ y = 6 \ , \ v = 36 \\ w = 1 \ , \ h = 4 \ , \ x = 0 \ , \ y = 6 \ , \ v = 4 \end{array}$$



$$\begin{array}{l} w=7\ ,\, h=8\ ,\, x=3\ ,\, y=0\ ,\, v=56\\ w=7\ ,\, h=2\ ,\, x=3\ ,\, y=8\ ,\, v=14\\ w=3\ ,\, h=9\ ,\, x=0\ ,\, y=0\ ,\, v=27\\ w=3\ ,\, h=1\ ,\, x=0\ ,\, y=9\ ,\, v=3 \end{array}$$



 $\begin{array}{l} w = 7 \ , \ h = 6 \ , \ x = 3 \ , \ y = 0 \ , \ v = 42 \\ w = 7 \ , \ h = 4 \ , \ x = 3 \ , \ y = 6 \ , \ v = 28 \\ w = 3 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 24 \end{array}$



w =9, h =10, x =1, y =0, v =90 w =1, h =8, x =0, y =0, v =8

[3x2]	7x2
4x8	6x8

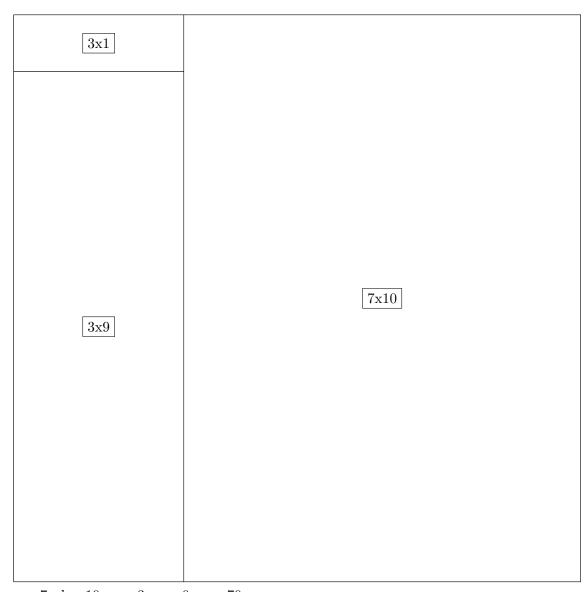
$$\begin{array}{l} w=6 \ , \ h=8 \ , \ x=4 \ , \ y=0 \ , \ v=48 \\ w=4 \ , \ h=8 \ , \ x=0 \ , \ y=0 \ , \ v=32 \\ w=7 \ , \ h=2 \ , \ x=3 \ , \ y=8 \ , \ v=14 \\ w=3 \ , \ h=2 \ , \ x=0 \ , \ y=8 \ , \ v=6 \end{array}$$

7x2	
8x8	2x10

w=2 , h=10 , x=8 , y=0 , v=20

 \mathbf{w} =8 , h =8 , x =0 , y =0 , v =64

 \mathbf{w} =7 , h =2 , x =1 , y =8 , v =14



$$\begin{array}{l} w = 7 \ , \ h = \! 10 \ , \ x = \! 3 \ , \ y = \! 0 \ , \ v = \! 70 \\ w = \! 3 \ , \ h = \! 9 \ , \ x = \! 0 \ , \ y = \! 0 \ , \ v = \! 27 \\ w = \! 3 \ , \ h = \! 1 \ , \ x = \! 0 \ , \ y = \! 9 \ , \ v = \! 3 \end{array}$$

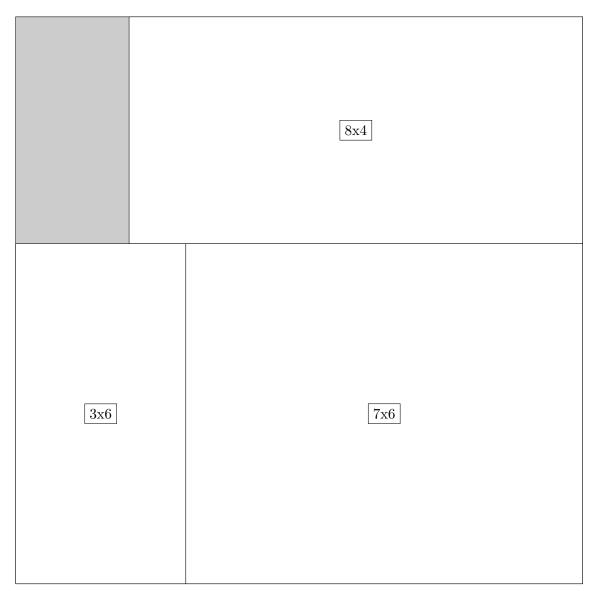
	6x2
2x8	8x8

 $\begin{array}{l} w = 8 \ , \ h = 8 \ , \ x = 2 \ , \ y = 0 \ , \ v = 64 \\ w = 2 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 16 \\ w = 6 \ , \ h = 2 \ , \ x = 4 \ , \ y = 8 \ , \ v = 12 \end{array}$

3x3	[7x3]
1x7	9x7

$$\begin{array}{l} w = 9 \ , \ h = 7 \ , \ x = 1 \ , \ y = 0 \ , \ v = 63 \\ w = 1 \ , \ h = 7 \ , \ x = 0 \ , \ y = 0 \ , \ v = 7 \\ w = 7 \ , \ h = 3 \ , \ x = 3 \ , \ y = 7 \ , \ v = 21 \end{array}$$

 \mathbf{w} =3 , h =3 , x =0 , y =7 , v =9



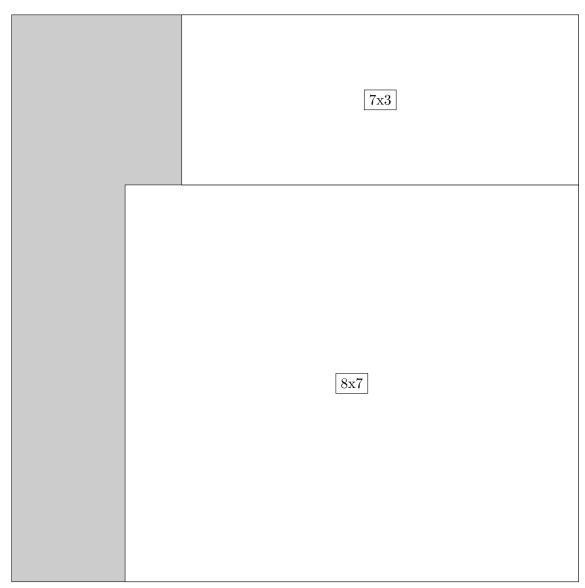
$$\begin{array}{l} w = 7 \ , \ h = 6 \ , \ x = 3 \ , \ y = 0 \ , \ v = 42 \\ w = 3 \ , \ h = 6 \ , \ x = 0 \ , \ y = 0 \ , \ v = 18 \\ w = 8 \ , \ h = 4 \ , \ x = 2 \ , \ y = 6 \ , \ v = 32 \end{array}$$

	6x4
4x9	6x6

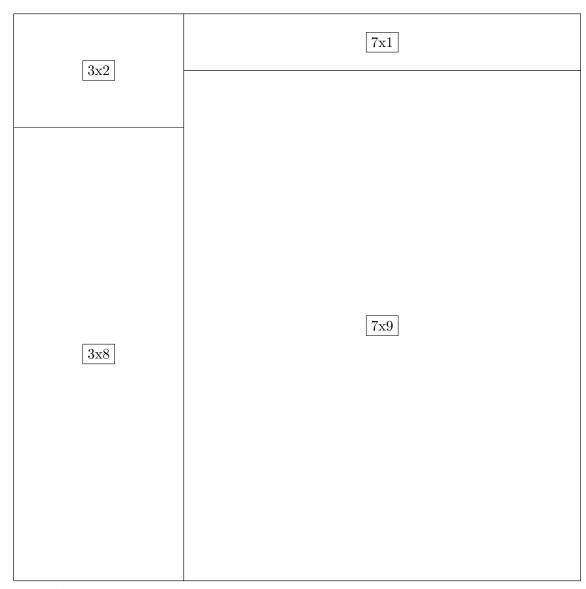
 $\begin{array}{l} w=6 \ , \ h=6 \ , \ x=4 \ , \ y=0 \ , \ v=36 \\ w=6 \ , \ h=4 \ , \ x=4 \ , \ y=6 \ , \ v=24 \\ w=4 \ , \ h=9 \ , \ x=0 \ , \ y=0 \ , \ v=36 \end{array}$

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





$$\begin{array}{l} w = 8 \ , \, h = 7 \ , \, x = 2 \ , \, y = 0 \ , \, v = 56 \\ w = 7 \ , \, h = 3 \ , \, x = 3 \ , \, y = 7 \ , \, v = 21 \end{array}$$



$$\mathbf{w}$$
 =7 , h =9 , x =3 , y =0 , v =63

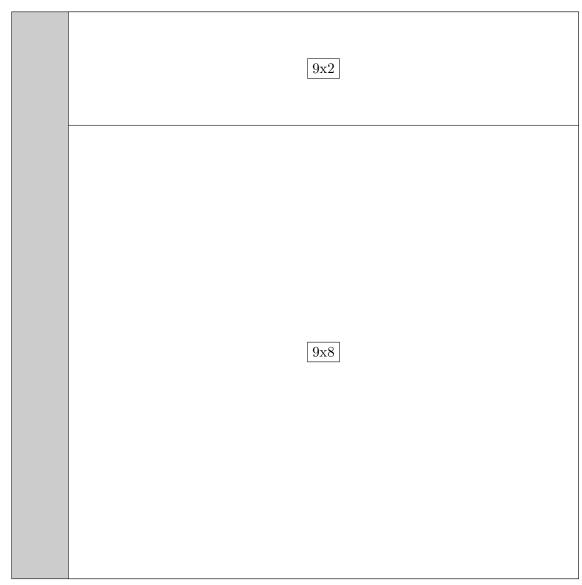
$$w = 7$$
, $h = 1$, $x = 3$, $y = 9$, $v = 7$

$$\mathbf{w}$$
 =3 , h =8 , x =0 , y =0 , v =24

$$\mathbf{w}$$
 =3 , h =2 , x =0 , y =8 , v =6

4x9 6x6	4x1	
		6x4
6x6	$\boxed{4\mathrm{x}9}$	
		[6x6]

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



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

4x7	6x7

w = 6, h = 7, x = 4, y = 0, v = 42

 \mathbf{w} =4 , h =7 , x =0 , y =0 , v =28

 \mathbf{w} =6 , h =3 , x =4 , y =7 , v =18

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

	62	x2
4x8	3x4	3x4
	62	x4

w = 6, h = 4, x = 4, y = 0, v = 24

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

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

w = 6, h = 2, x = 4, y = 8, v = 12

	8x1
2x9	8x9

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

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