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

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

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

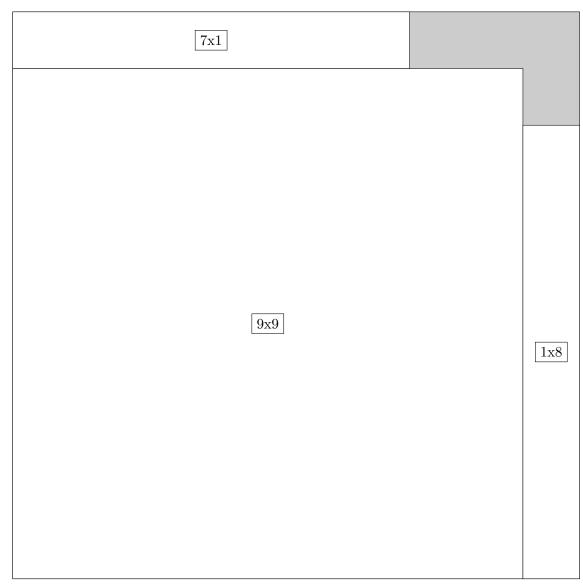
GenNodeCnt: $\underline{\mathbf{1}}$ PrimalNode: $\underline{\mathbf{0}}$ ColumnCount: $\underline{\mathbf{30}}$ TotalCutCount: $\underline{\mathbf{0}}$ RootCutCount: $\underline{\mathbf{0}}$ LPSolverCnt: $\underline{\mathbf{1}}$ PricingSolverCnt: $\underline{\mathbf{0}}$ BranchAndBoundNum: $\underline{\mathbf{1}}$

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

 $\begin{array}{ll} {\rm TimeOnInitSolution:} \ \underline{0.180 \ s} \\ {\rm TimeOnPrimal:} \ \underline{0.000 \ s} \\ {\rm TimeOnPricing:} \ \underline{0.000 \ s} \\ {\rm TimeOnRmp:} \ \underline{0.063 \ s} \\ {\rm TotalTime:} \ \underline{0.305 \ s} \end{array}$



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

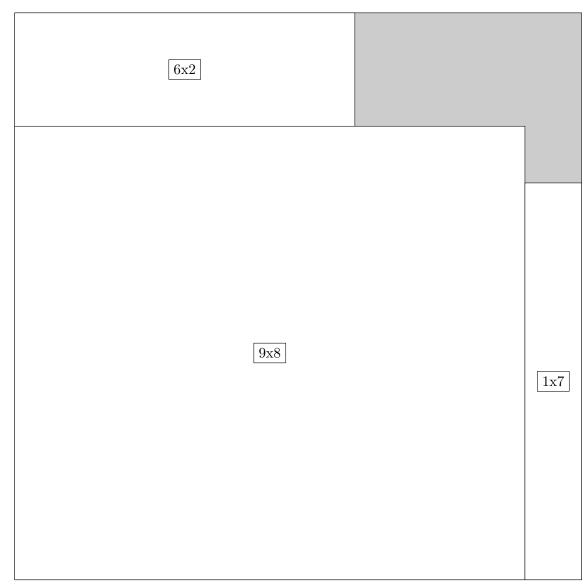


$$w = 9$$
, $h = 9$, $x = 0$, $y = 0$, $v = 81$

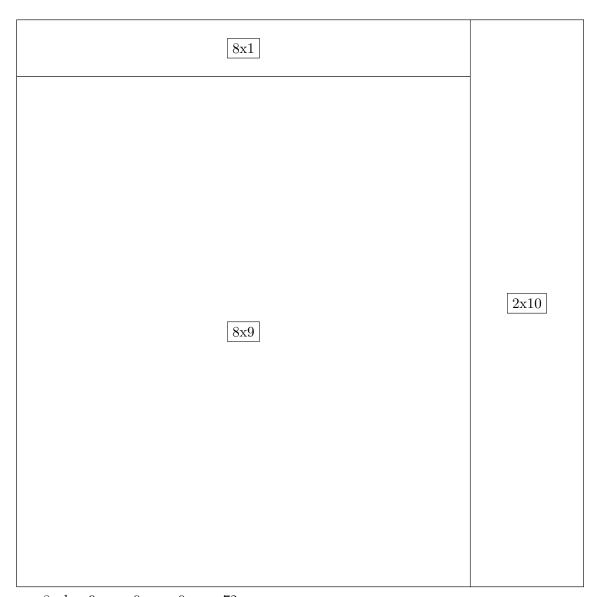
$$\mathbf{w}$$
 =1 , h =8 , x =9 , y =0 , v =8

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





$$\begin{array}{l} w = 9 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 72 \\ w = 6 \ , \ h = 2 \ , \ x = 0 \ , \ y = 8 \ , \ v = 12 \\ w = 1 \ , \ h = 7 \ , \ x = 9 \ , \ y = 0 \ , \ v = 7 \end{array}$$



 \mathbf{w} =8 , h =9 , x =0 , y =0 , v =72

 $\le = 2$, h = 10 , x = 8 , y = 0 , v = 20

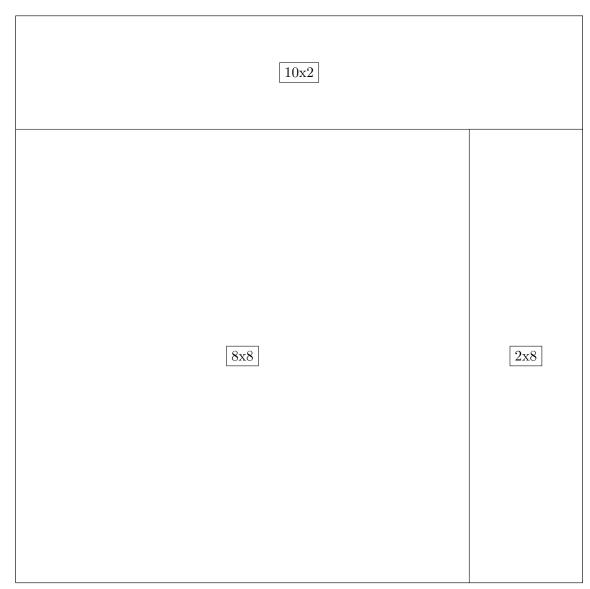
 \mathbf{w} =8 , h =1 , x =0 , y =9 , v =8

	[3x1]
7x10	3x9

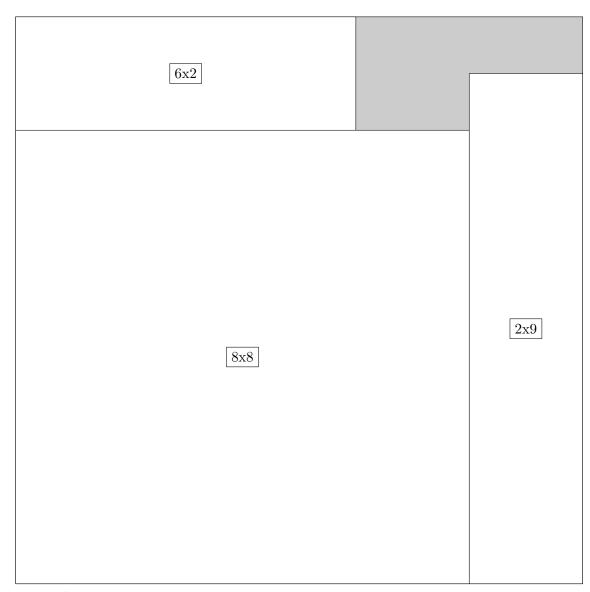
 \mathbf{w} =7 , h =10 , x =0 , y =0 , v =70

 \mathbf{w} =3 , h =9 , x =7 , y =0 , v =27

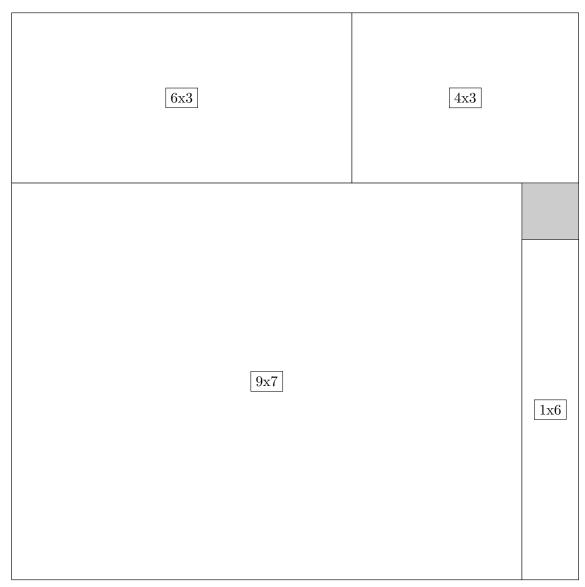
w = 3 , h = 1 , x = 7 , y = 9 , v = 3



 $\begin{array}{l} w = 8 \;,\; h = 8 \;,\; x = 0 \;,\; y = 0 \;,\; v = 64 \\ w = 10 \;,\; h = 2 \;,\; x = 0 \;,\; y = 8 \;,\; v = 20 \\ w = 2 \;,\; h = 8 \;,\; x = 8 \;,\; y = 0 \;,\; v = 16 \end{array}$



$$\begin{array}{l} w = 8 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 64 \\ w = 2 \ , \ h = 9 \ , \ x = 8 \ , \ y = 0 \ , \ v = 18 \\ w = 6 \ , \ h = 2 \ , \ x = 0 \ , \ y = 8 \ , \ v = 12 \end{array}$$



$$\le 9$$
 , h =7 , x =0 , y =0 , v =63

$$\mathbf{w}$$
 =4 , h =3 , x =6 , y =7 , v =12

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

$$\mathbf{w}$$
 =6 , h =3 , x =0 , y =7 , v =18

3x3	7x3	
		1x3
	9x7	1x4

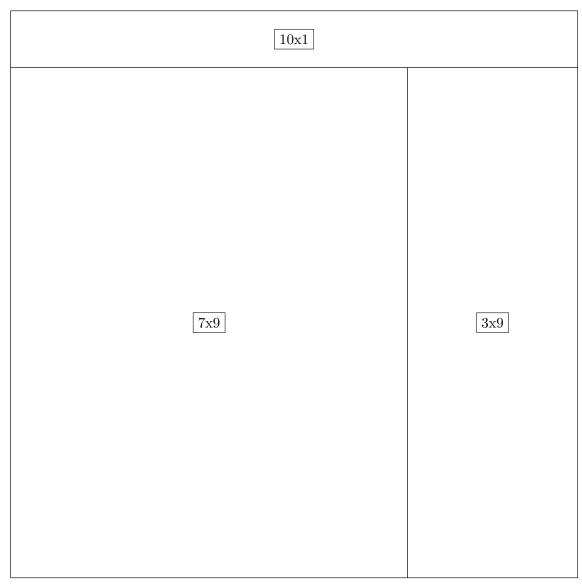
$$\mathbf{w}$$
 =9 , h =7 , x =0 , y =0 , v =63

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

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

$$\mathbf{w}=\!\!1$$
 , $\mathbf{h}=\!\!4$, $\mathbf{x}=\!\!9$, $\mathbf{y}=\!\!0$, $\mathbf{v}=\!\!4$

$$\mathbf{w}=\!1$$
 , $\mathbf{h}=\!3$, $\mathbf{x}=\!\!9$, $\mathbf{y}=\!\!4$, $\mathbf{v}=\!\!3$



 $\begin{array}{l} w = 7 \ , \ h = 9 \ , \ x = 0 \ , \ y = 0 \ , \ v = 63 \\ w = 3 \ , \ h = 9 \ , \ x = 7 \ , \ y = 0 \ , \ v = 27 \\ w = 10 \ , \ h = 1 \ , \ x = 0 \ , \ y = 9 \ , \ v = 10 \end{array}$



8x3	2x2
	2x4
8x7	2x4

$$w = 8$$
, $h = 7$, $x = 0$, $y = 0$, $v = 56$

$$\le =8$$
 , h =3 , x =0 , y =7 , v =24

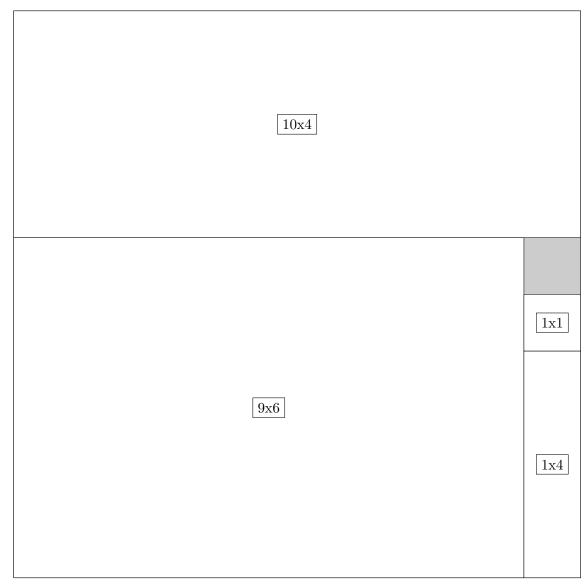
$$\mathbf{w}$$
 =2 , h =4 , x =8 , y =0 , v =8

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

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

7x2	
	3x5
7x8	3x5

$$w = 7$$
, $h = 8$, $x = 0$, $y = 0$, $v = 56$



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

		7x1
62	c 9	[4x9]

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

 \mathbf{w} =7 , h =1 , x =3 , y =9 , v =7

		7x2
62	x8	4x8

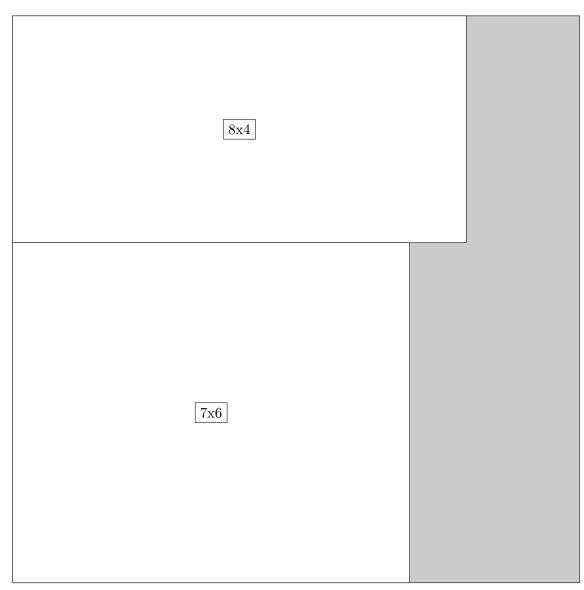
 $\begin{array}{l} w = 6 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 48 \\ w = 4 \ , \ h = 8 \ , \ x = 6 \ , \ y = 0 \ , \ v = 32 \end{array}$

 \mathbf{w} =7 , h =2 , x =3 , y =8 , v =14

		7x2
62	x8	4x8

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

 \mathbf{w} =7 , h =2 , x =3 , y =8 , v =14



7x4	3x2
[7X4]	
[7x6]	3x8

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

$$\mathbf{w}$$
 =7 , h =4 , x =0 , y =6 , v =28

$$\le =3$$
 , h =8 , x =7 , y =0 , v =
24

$$\mathbf{w}$$
 =3 , h =2 , x =7 , y =8 , v =6

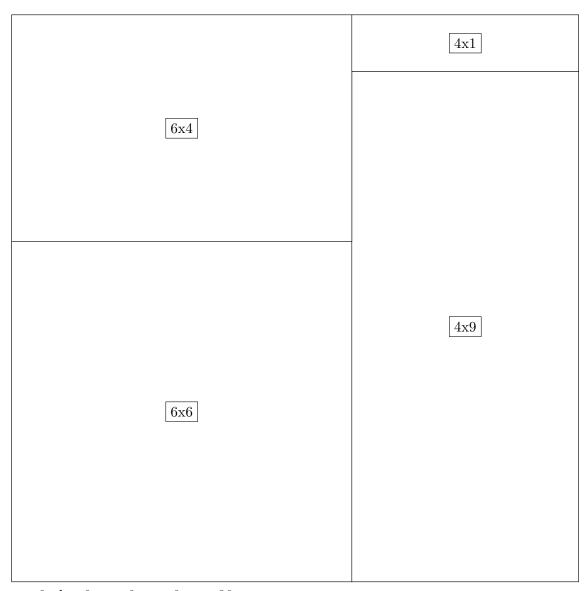
3x2		[7x3]
62	¢7	4x7

$$\mathbf{w}$$
 =6 , \mathbf{h} =7 , \mathbf{x} =0 , \mathbf{y} =0 , \mathbf{v} =42

$$w = 4$$
, $h = 7$, $x = 6$, $y = 0$, $v = 28$

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

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



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

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

$$\mathbf{w}$$
 =4 , h =1 , x =6 , y =9 , v =4

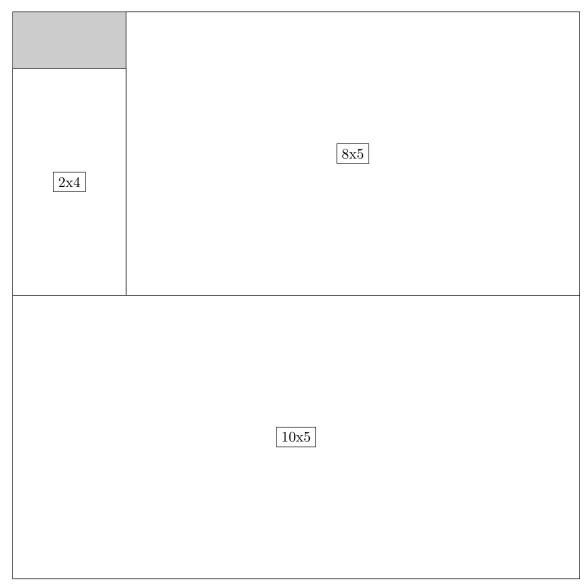
	[3x1]
6x4	
	4x9
6x6	

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

$$\le=4$$
 , h =9 , x =6 , y =0 , v =36

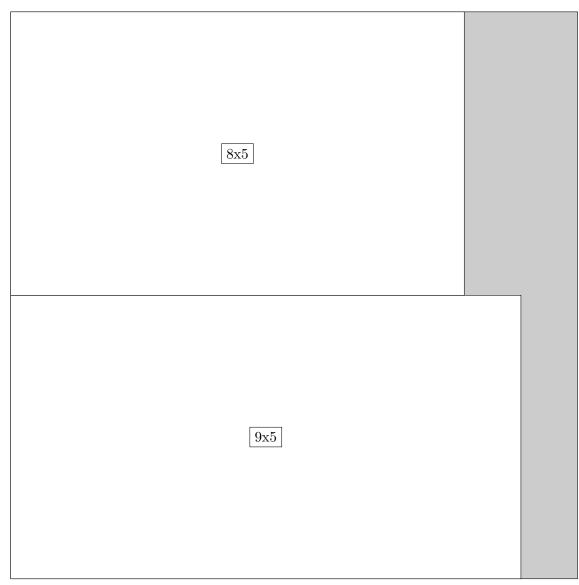
$$\mathbf{w}$$
 =6 , h =4 , x =0 , y =6 , v =24

$$\mathbf{w}$$
 =3 , h =1 , x =6 , y =9 , v =3



$$\begin{array}{l} w = & 10 \ , \ h = & 5 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 50 \\ w = & 8 \ , \ h = & 5 \ , \ x = & 2 \ , \ y = & 5 \ , \ v = & 40 \\ w = & 2 \ , \ h = & 4 \ , \ x = & 0 \ , \ y = & 5 \ , \ v = & 8 \end{array}$$

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



	9x2	
		3x4
4x8	3x8	3x4

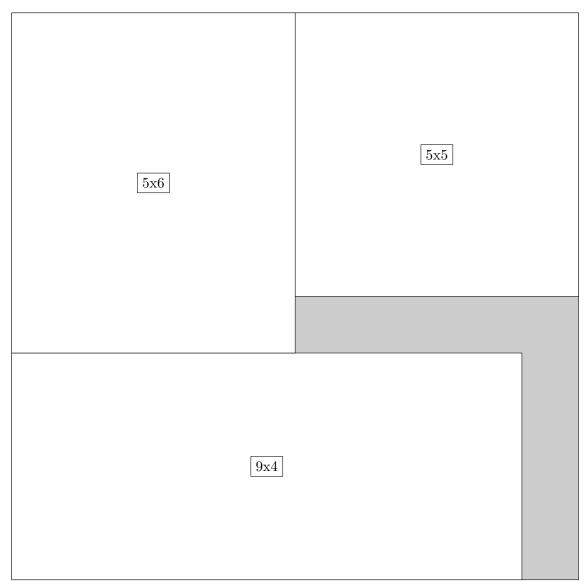
$$w = 4$$
, $h = 8$, $x = 0$, $y = 0$, $v = 32$

$$\mathbf{w}$$
 =3 , h =8 , x =4 , y =0 , v =24

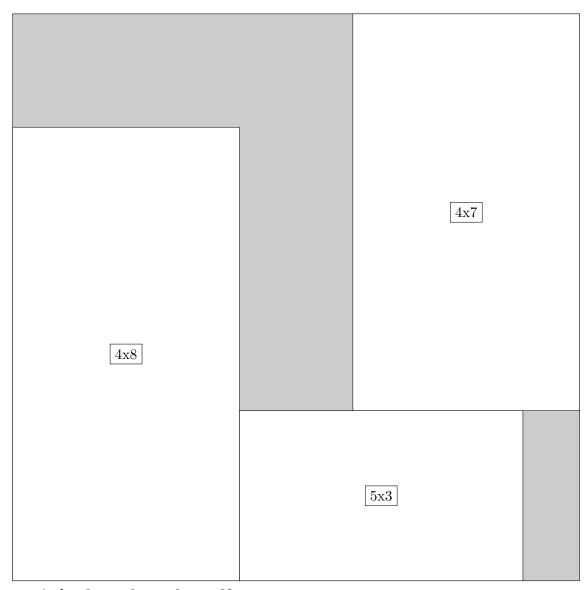
$$w = 3$$
, $h = 4$, $x = 7$, $y = 0$, $v = 12$

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

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



$$\begin{array}{l} w = 5 \ , \ h = 5 \ , \ x = 5 \ , \ y = 5 \ , \ v = 25 \\ w = 9 \ , \ h = 4 \ , \ x = 0 \ , \ y = 0 \ , \ v = 36 \\ w = 5 \ , \ h = 6 \ , \ x = 0 \ , \ y = 4 \ , \ v = 30 \end{array}$$



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

	[3x1]	
4x3		
	3x5	[3x6]
4x7	$\boxed{6\mathrm{x}4}$	

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

w = 3, h = 6, x = 7, y = 4, v = 18

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

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

 \mathbf{w} =3 , h =1 , x =4 , y =9 , v =3