${\bf ClassName:}\ {\bf Class_01.2bp\text{-}38}$

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

TypeNum: <u>61</u>
Num: <u>80</u>
OutS: <u>3000</u>
InS: <u>2787</u>
Rate: <u>0.929</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: **true**

 $\begin{array}{ll} {\rm TimeOnInitSolution:} \ \underline{0.100 \ s} \\ {\rm TimeOnPrimal:} \ \underline{0.000 \ s} \\ {\rm TimeOnPricing:} \ \underline{0.000 \ s} \\ {\rm TimeOnRmp:} \ \underline{0.094 \ s} \\ {\rm TotalTime:} \ \underline{0.272 \ s} \end{array}$

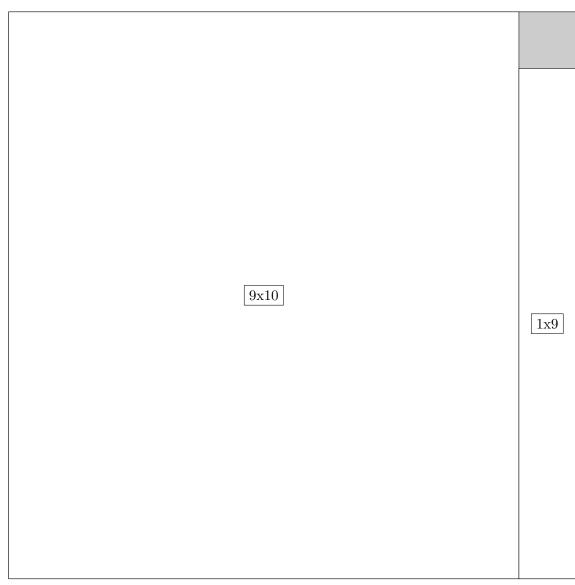


 \mathbf{w} =10 , h =10 , x =0 , y =0 , v =100

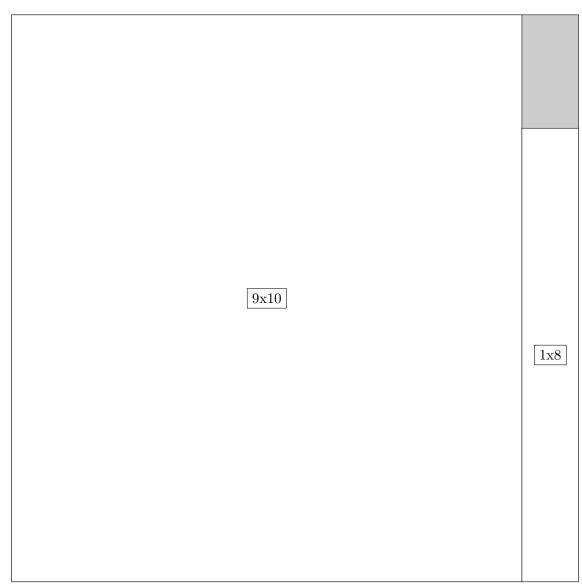




w =9, h =10, x =0, y =0, v =90 w =1, h =10, x =9, y =0, v =10



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



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

2x1	[4x1]	
		1x2
9x9		
		1x5

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

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

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

$$\mathbf{w}$$
 =2 , h =1 , x =4 , y =9 , v =2

$$w = 1$$
 , $h = 2$, $x = 9$, $y = 5$, $v = 2$



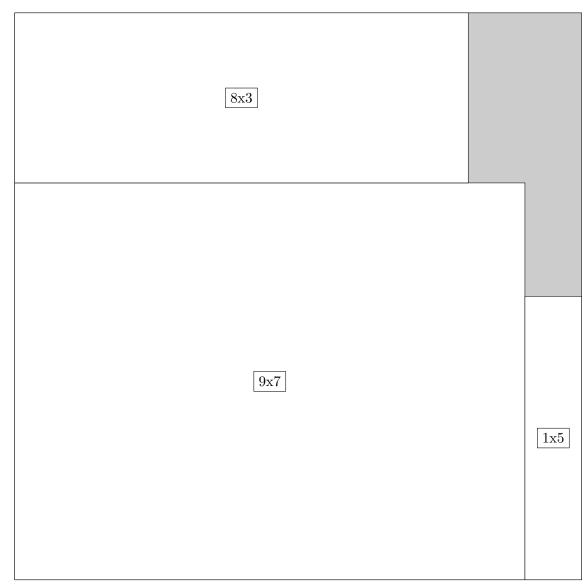


8x9	2x9

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



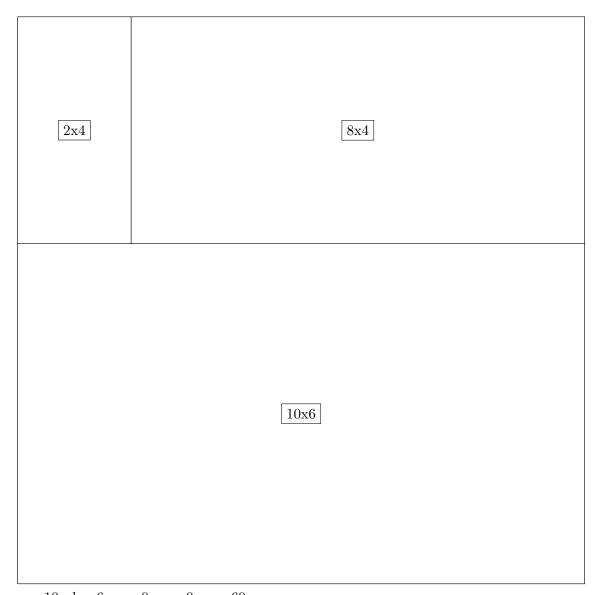
7x10	[3x10]



$$\begin{array}{l} w = 9 \ , \ h = 7 \ , \ x = 0 \ , \ y = 0 \ , \ v = 63 \\ w = 8 \ , \ h = 3 \ , \ x = 0 \ , \ y = 7 \ , \ v = 24 \\ w = 1 \ , \ h = 5 \ , \ x = 9 \ , \ y = 0 \ , \ v = 5 \end{array}$$

[7x1]	
7x9	3x10

 $\begin{array}{l} w = 7 \ , \ h = 9 \ , \ x = 0 \ , \ y = 0 \ , \ v = 63 \\ w = 3 \ , \ h = 10 \ , \ x = 7 \ , \ y = 0 \ , \ v = 30 \\ w = 7 \ , \ h = 1 \ , \ x = 0 \ , \ y = 9 \ , \ v = 7 \end{array}$



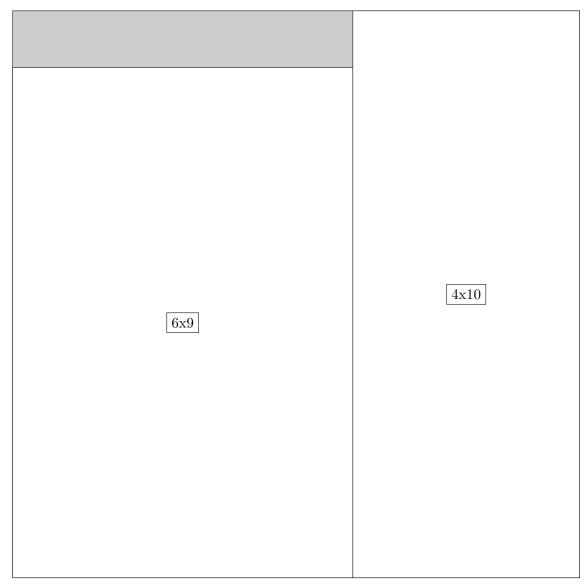
$$\begin{array}{l} w = & 10 \ , \ h = & 6 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 60 \\ w = & 8 \ , \ h = & 4 \ , \ x = & 2 \ , \ y = & 6 \ , \ v = & 32 \\ w = & 2 \ , \ h = & 4 \ , \ x = & 0 \ , \ y = & 6 \ , \ v = & 8 \end{array}$$

7x4	[3x3]
9x6	
	1x2

$$\begin{array}{l} w = 9 \ , \ h = 6 \ , \ x = 0 \ , \ y = 0 \ , \ v = 54 \\ w = 7 \ , \ h = 4 \ , \ x = 0 \ , \ y = 6 \ , \ v = 28 \end{array}$$

$$w = 3$$
, $h = 3$, $x = 7$, $y = 6$, $v = 9$

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



w =6, h =9, x =0, y =0, v =54 w =4, h =10, x =6, y =0, v =40

6x9	[4x9]

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

	2x7	2x7
6x9		
	42	:3

w = 6, h = 9, x = 0, y = 0, v = 54

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

 \mathbf{w} =2 , h =7 , x =6 , y =3 , v =14

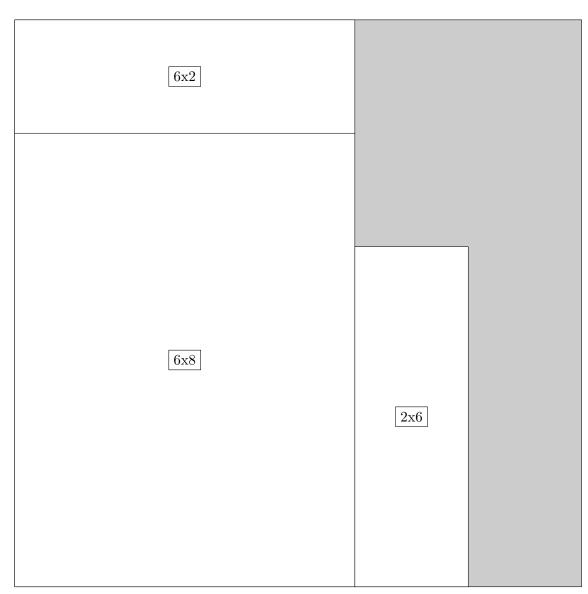
 $\mathbf{w}=\!\!4$, $\mathbf{h}=\!\!3$, $\mathbf{x}=\!\!6$, $\mathbf{y}=\!\!0$, $\mathbf{v}=\!\!12$

	3x1
[7x3]	
	3x9
7x7	

$$w = 7$$
, $h = 7$, $x = 0$, $y = 0$, $v = 49$

$$w = 3$$
, $h = 9$, $x = 7$, $y = 0$, $v = 27$

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

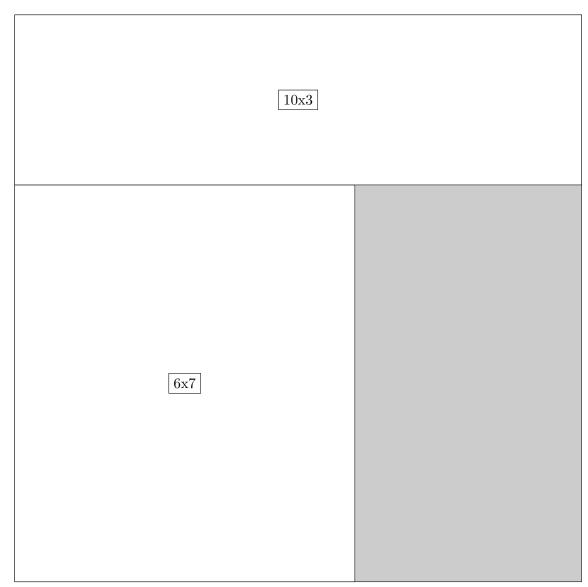


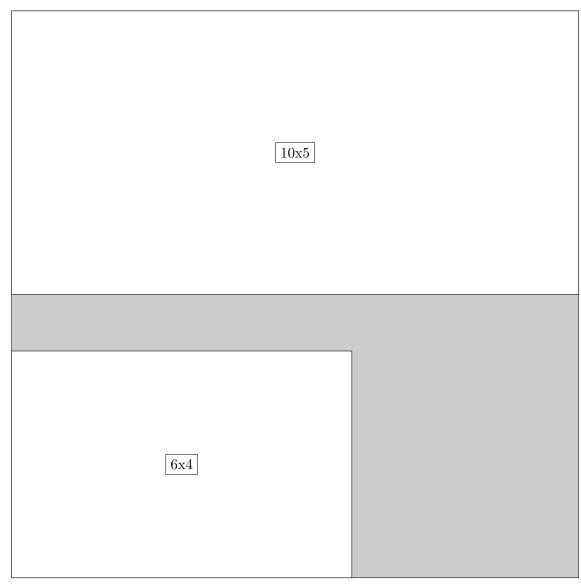
$$\begin{array}{l} w=6 \ , \ h=8 \ , \ x=0 \ , \ y=0 \ , \ v=48 \\ w=6 \ , \ h=2 \ , \ x=0 \ , \ y=8 \ , \ v=12 \\ w=2 \ , \ h=6 \ , \ x=6 \ , \ y=0 \ , \ v=12 \end{array}$$

$$w = 2$$
, $h = 6$, $x = 6$, $y = 0$, $v = 12$

10x3	
6x7	4x7

$$\begin{array}{l} w = 6 \;,\; h = 7 \;,\; x = 0 \;,\; y = 0 \;,\; v = 42 \\ w = 10 \;,\; h = 3 \;,\; x = 0 \;,\; y = 7 \;,\; v = 30 \\ w = 4 \;,\; h = 7 \;,\; x = 6 \;,\; y = 0 \;,\; v = 28 \end{array}$$

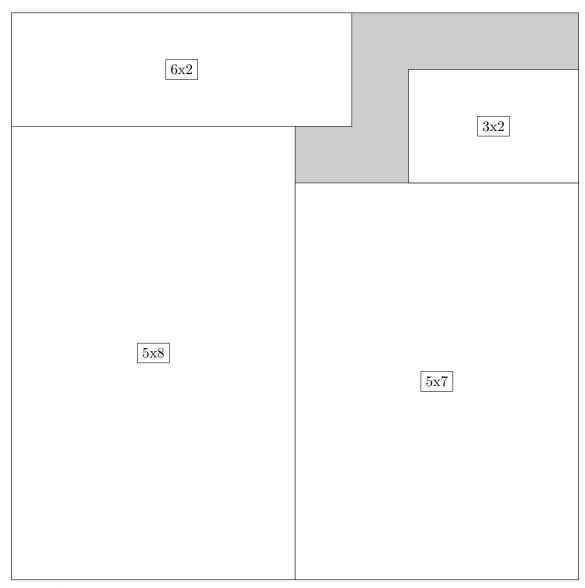




$$\begin{array}{l} w = \! 10 \ , \ h = \! 5 \ , \ x = \! 0 \ , \ y = \! 5 \ , \ v = \! 50 \\ w = \! 6 \ , \ h = \! 4 \ , \ x = \! 0 \ , \ y = \! 0 \ , \ v = \! 24 \end{array}$$

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

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

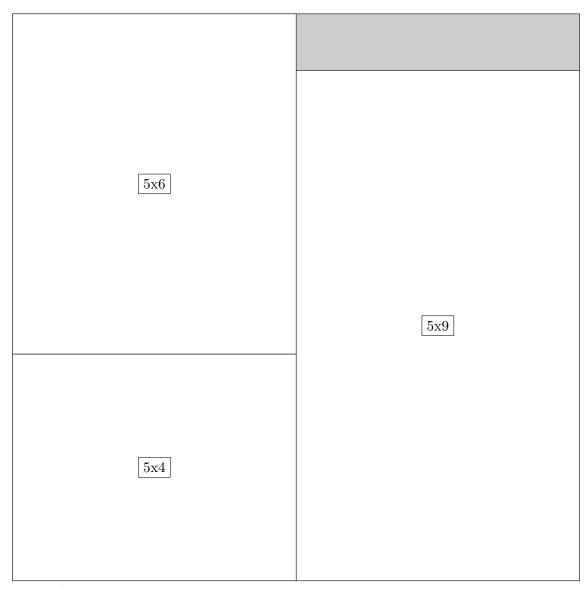


$$\mathbf{w}$$
 =5 , h =8 , x =0 , y =0 , v =40

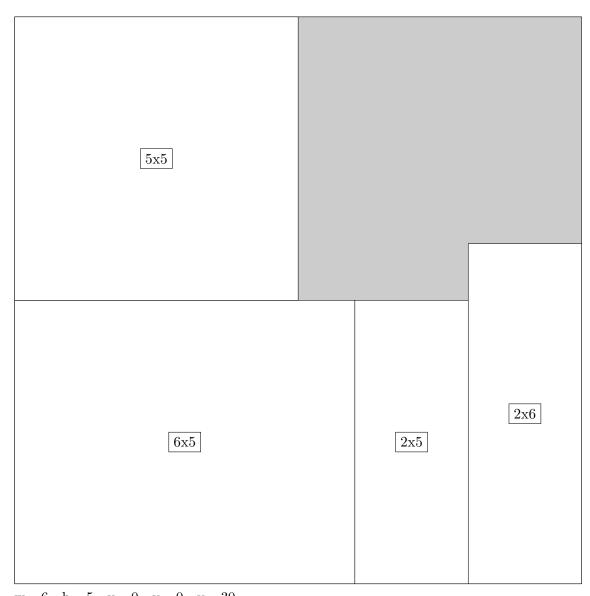
$$\mathbf{w}$$
 =5 , h =7 , x =5 , y =0 , v =35

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

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



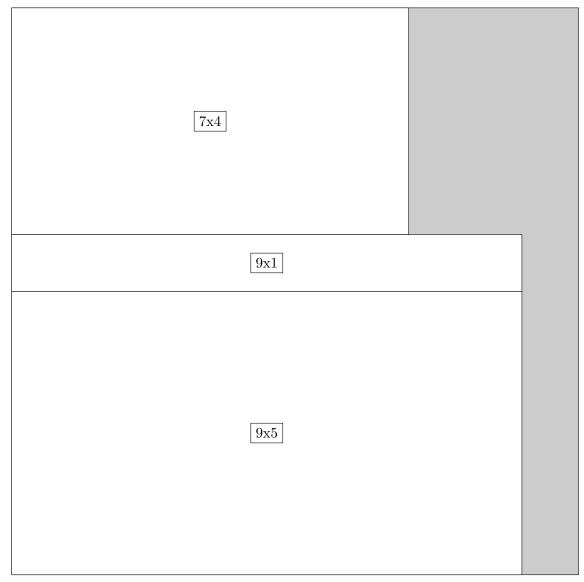
$$\begin{array}{l} w = 5 \ , \ h = 9 \ , \ x = 5 \ , \ y = 0 \ , \ v = 45 \\ w = 5 \ , \ h = 4 \ , \ x = 0 \ , \ y = 0 \ , \ v = 20 \\ w = 5 \ , \ h = 6 \ , \ x = 0 \ , \ y = 4 \ , \ v = 30 \end{array}$$



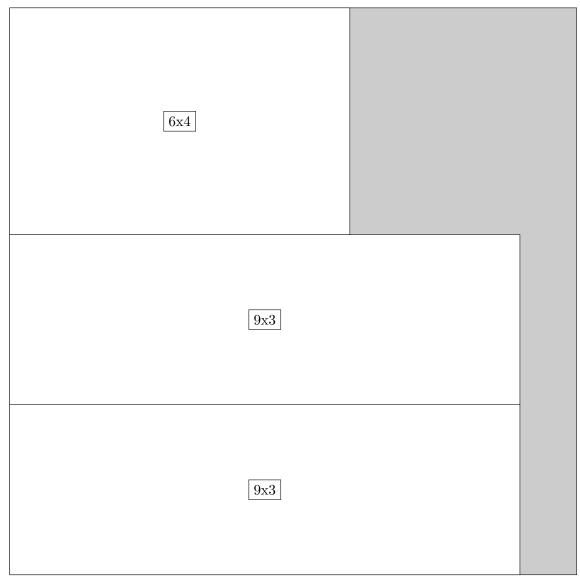
$$\begin{array}{c} w = 6 \ , \ h = 5 \ , \ x = 0 \ , \ y = 0 \ , \ v = 30 \\ w = 5 \ , \ h = 5 \ , \ x = 0 \ , \ y = 5 \ , \ v = 25 \end{array}$$

$$w = 2$$
, $h = 6$, $x = 8$, $y = 0$, $v = 12$

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



$$\begin{array}{l} w = 9 \ , \ h = 5 \ , \ x = 0 \ , \ y = 0 \ , \ v = 45 \\ w = 7 \ , \ h = 4 \ , \ x = 0 \ , \ y = 6 \ , \ v = 28 \\ w = 9 \ , \ h = 1 \ , \ x = 0 \ , \ y = 5 \ , \ v = 9 \end{array}$$



$$\begin{array}{l} w=9\ ,\, h=3\ ,\, x=0\ ,\, y=0\ ,\, v=27\\ w=9\ ,\, h=3\ ,\, x=0\ ,\, y=3\ ,\, v=27\\ w=6\ ,\, h=4\ ,\, x=0\ ,\, y=6\ ,\, v=24 \end{array}$$