${\bf ClassName:}\ {\bf Class_01.2bp\text{-}33}$

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

TypeNum: <u>58</u> Num: <u>80</u> OutS: <u>2700</u> InS: <u>2438</u> Rate: <u>0.903</u> UB: <u>27</u> LB0: <u>27</u>

LB: **27**

LBWithCut: $\underline{27}$ NodeCut: $\underline{0}$

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

GenNodeCnt: $\underline{\mathbf{1}}$ PrimalNode: $\underline{\mathbf{0}}$ ColumnCount: $\underline{\mathbf{27}}$ TotalCutCount: $\underline{\mathbf{0}}$ RootCutCount: $\underline{\mathbf{0}}$ LPSolverCnt: $\underline{\mathbf{1}}$ PricingSolverCnt: $\underline{\mathbf{0}}$ BranchAndBoundNum: $\underline{\mathbf{1}}$

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

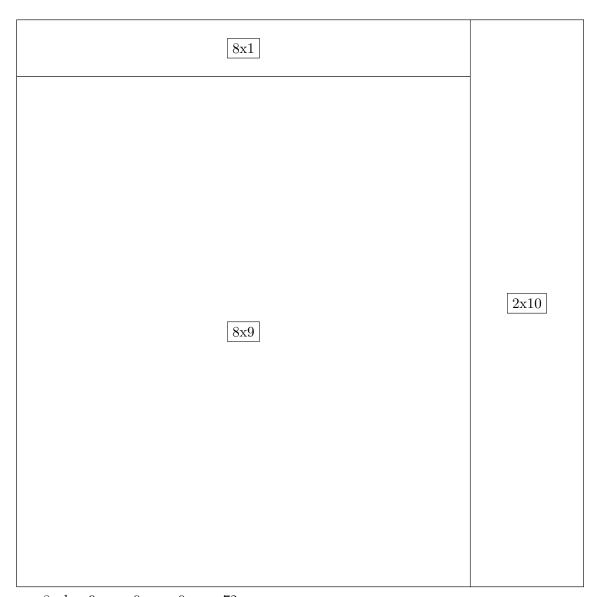
 $\begin{array}{ll} {\rm TimeOnInitSolution:} \ \underline{0.010 \ s} \\ {\rm TimeOnPrimal:} \ \underline{0.000 \ s} \\ {\rm TimeOnPricing:} \ \underline{0.000 \ s} \\ {\rm TimeOnRmp:} \ \underline{0.078 \ s} \\ {\rm TotalTime:} \ \underline{0.151 \ s} \end{array}$





1x2	6x2	
9x8		1x10
3.0		

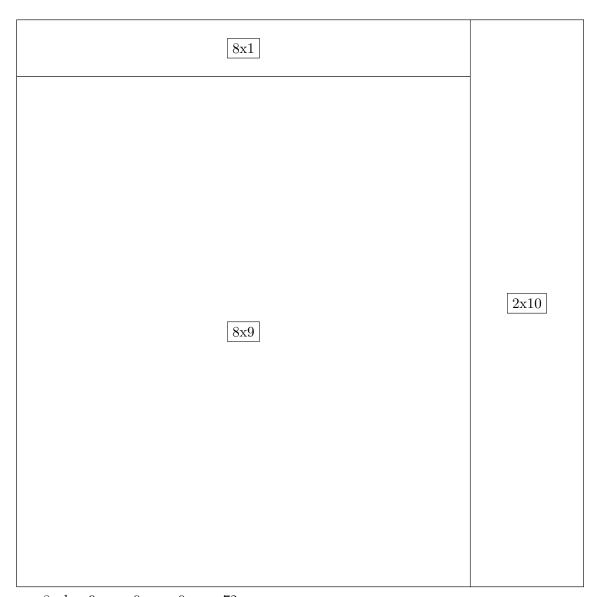
$$\begin{array}{l} w = 9 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 72 \\ w = 6 \ , \ h = 2 \ , \ x = 3 \ , \ y = 8 \ , \ v = 12 \\ w = 1 \ , \ h = 10 \ , \ x = 9 \ , \ y = 0 \ , \ v = 10 \\ w = 1 \ , \ h = 2 \ , \ x = 2 \ , \ y = 8 \ , \ v = 2 \end{array}$$



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

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

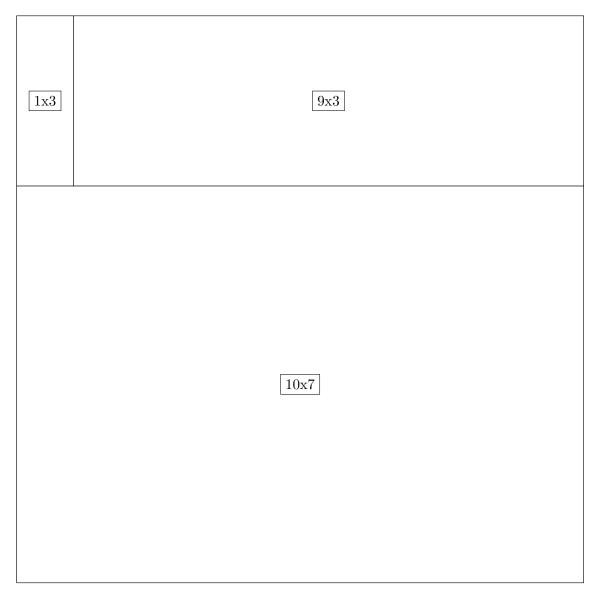
 \mathbf{w} =8 , h =1 , x =0 , y =9 , v =8



 \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



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

7x10	[3x10]

7x10	[3x10]

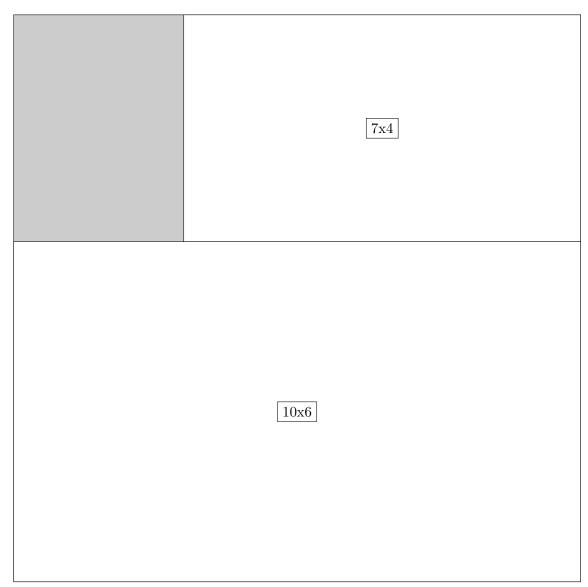
8x8	[2x8]

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

8x8	[2x8]

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





w =10, h =6, x =0, y =0, v =60 w =7, h =4, x =3, y =6, v =28

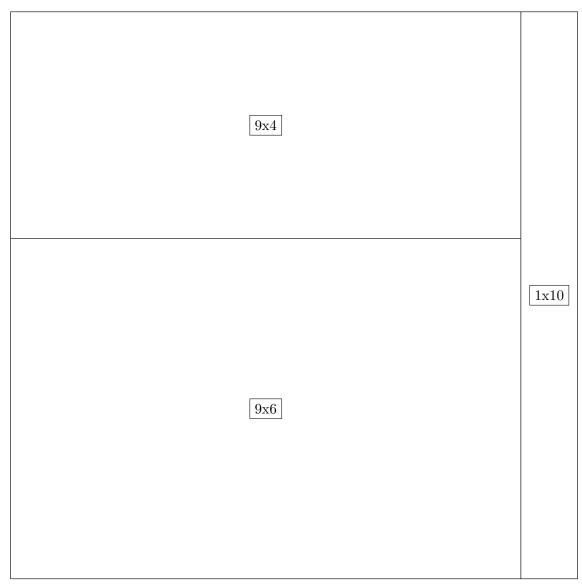
8x3	2x4
8x7	2x6

$$\le =8$$
 , h =7 , x =0 , y =0 , v =
56

$$\mathbf{w}$$
 =8 , h =3 , x =0 , y =7 , v =24

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

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



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

2x1	4x1	
		4 10
	$\boxed{6\mathrm{x}9}$	$\boxed{4\mathrm{x}10}$

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

 \mathbf{w} =4 , h =10 , x =6 , y =0 , v =40

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

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

3x1		7x1
68	(9	$\boxed{4\mathrm{x}9}$

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

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

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

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

7x3	3x5
7x7	3x5

 \mathbf{w} =7 , h =7 , x =0 , y =0 , v =49

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

 ≤ 3 , h = 5 , x = 7 , y = 0 , v = 15

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

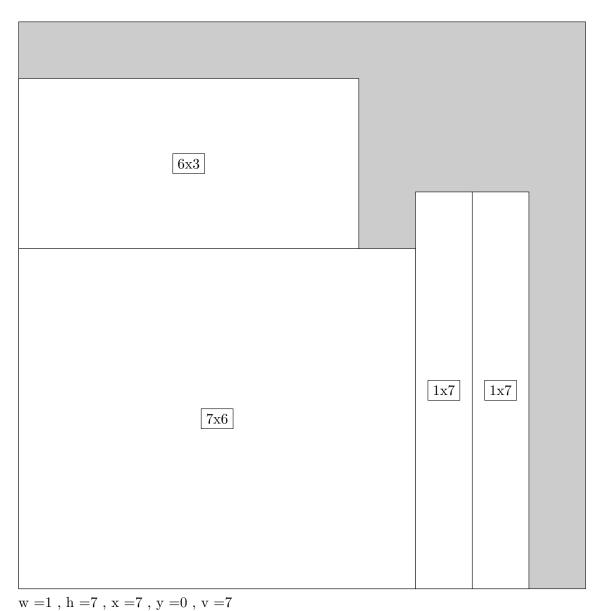
8x3		
7x6	2x6	1x6

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

$$\mathbf{w}$$
 =8 , h =3 , x =0 , y =6 , v =24

$$\mathbf{w}$$
 =2 , h =6 , x =7 , y =0 , v =12

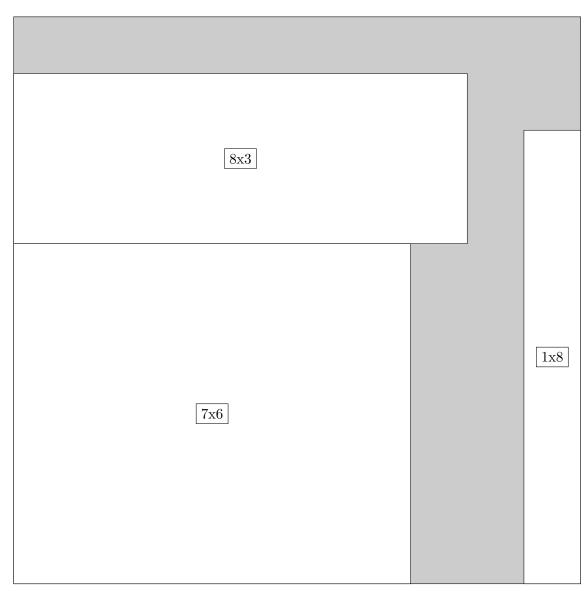
$$\mathbf{w}$$
 =1 , h =6 , x =9 , y =0 , v =6



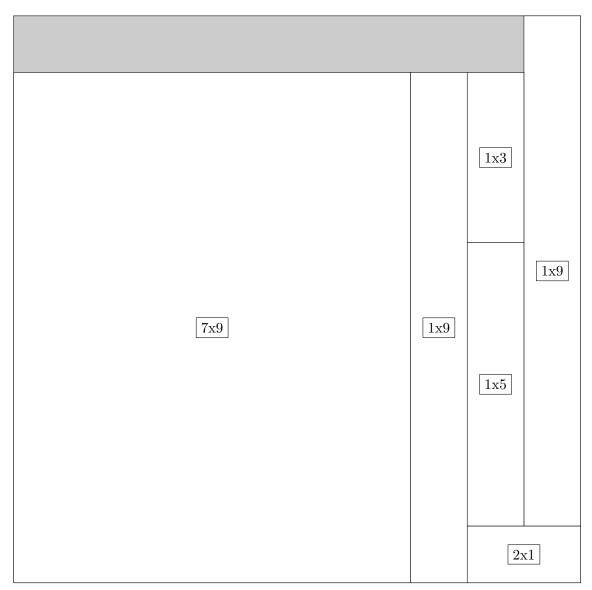
$$w = 1$$
, $h = 7$, $x = 7$, $y = 0$, $v = 7$
 $w = 7$, $h = 6$, $x = 0$, $y = 0$, $v = 42$

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

$$\mathbf{w}$$
 =1 , h =7 , x =8 , y =0 , v =7



 $\begin{array}{l} w = 7 \ , \ h = 6 \ , \ x = 0 \ , \ y = 0 \ , \ v = 42 \\ w = 8 \ , \ h = 3 \ , \ x = 0 \ , \ y = 6 \ , \ v = 24 \\ w = 1 \ , \ h = 8 \ , \ x = 9 \ , \ y = 0 \ , \ v = 8 \end{array}$



$$w = 1$$
, $h = 9$, $x = 7$, $y = 0$, $v = 9$

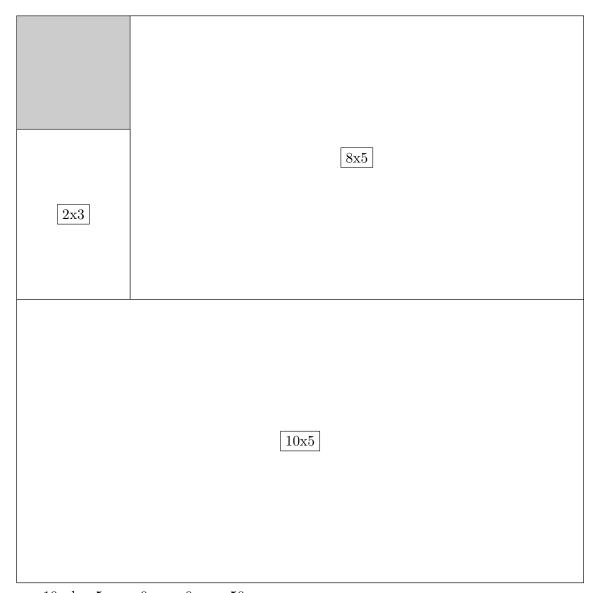
$$\mathbf{w}$$
 =1 , h =9 , x =9 , y =1 , v =9

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

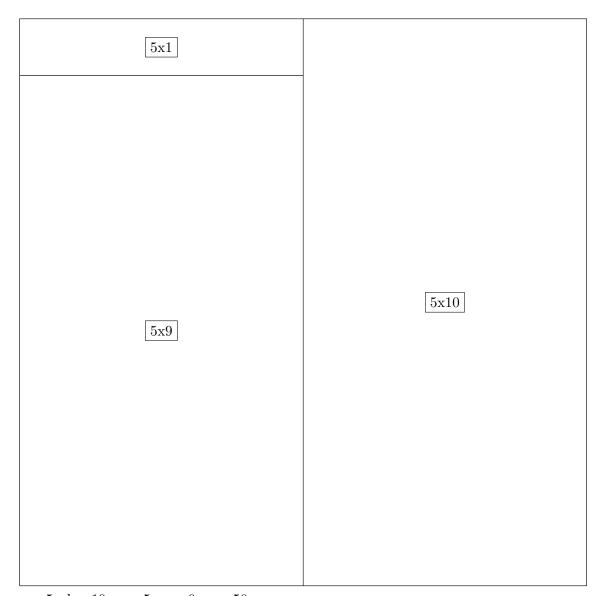
$$\mathbf{w}$$
 =1 , h =5 , x =8 , y =1 , v =5

$$\mathbf{w}$$
 =1 , h =3 , x =8 , y =6 , v =3

$$\mathbf{w}$$
 =2 , h =1 , x =8 , y =0 , v =2

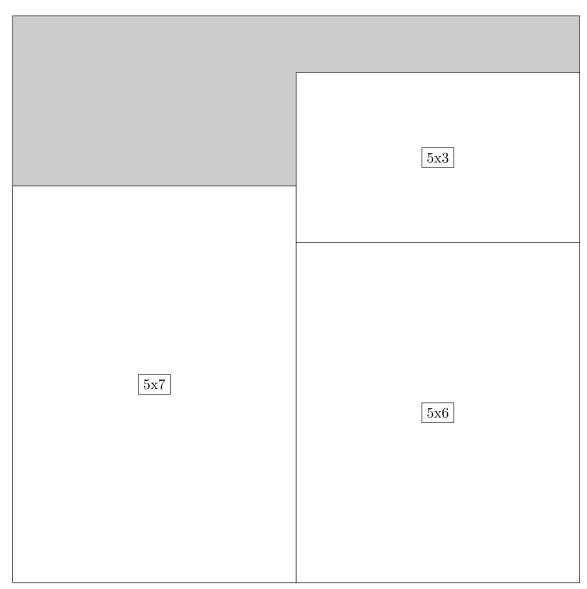


$$\begin{array}{l} w = & 10 \ , \ h = & 5 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 50 \\ w = & 8 \ , \ h = & 5 \ , \ x = & 2 \ , \ y = & 5 \ , \ v = & 40 \\ w = & 2 \ , \ h = & 3 \ , \ x = & 0 \ , \ y = & 5 \ , \ v = & 6 \end{array}$$



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

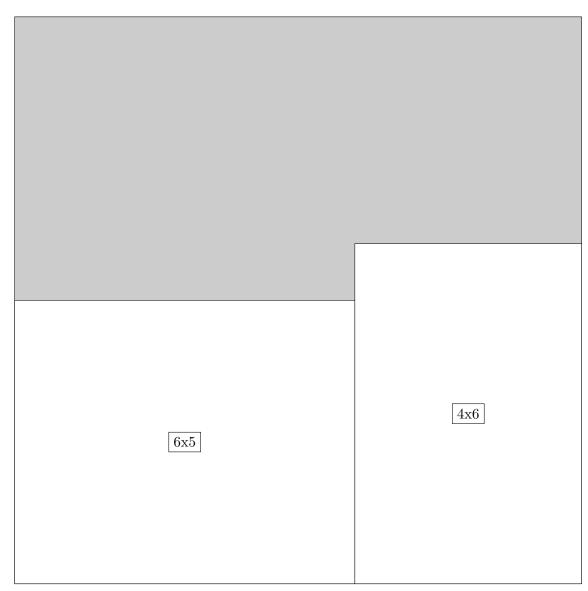
 \mathbf{w} =5 , h =1 , x =0 , y =9 , v =5

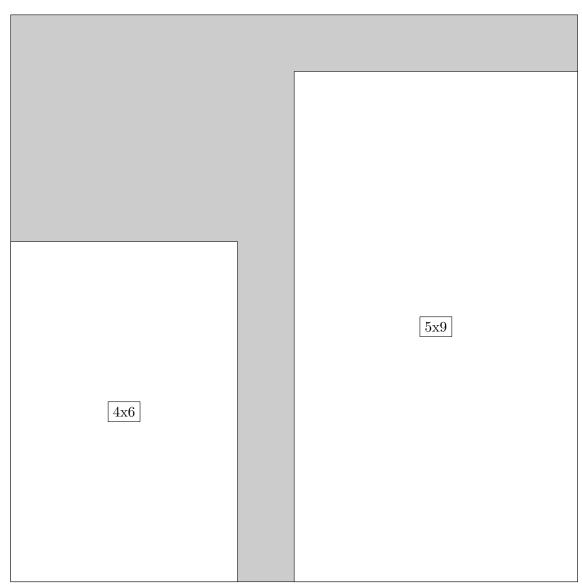


w=5 , h=7 , x=0 , y=0 , v=35

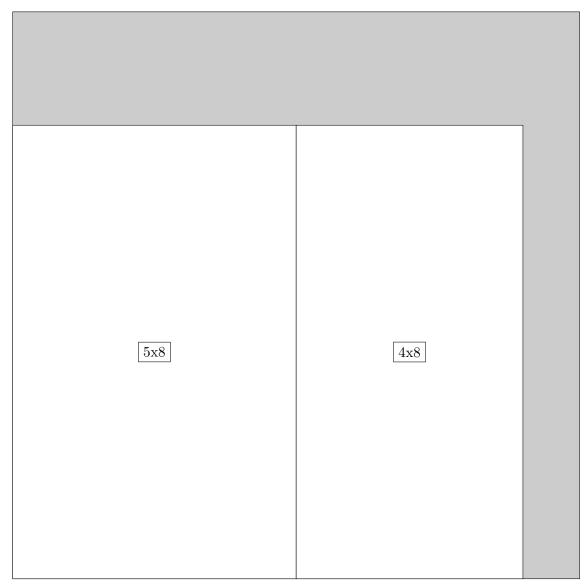
w =5 , h =6 , x =5 , y =0 , v =30

 \mathbf{w} =5 , h =3 , x =5 , y =6 , v =15





w =5, h =9, x =5, y =0, v =45 w =4, h =6, x =0, y =0, v =24



w =5, h =8, x =0, y =0, v =40 w =4, h =8, x =5, y =0, v =32