${\bf ClassName:}~{\bf Class_01.2bp\text{-}30}$

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

TypeNum: <u>58</u> Num: <u>80</u> OutS: <u>2500</u> InS: <u>2274</u> Rate: <u>0.910</u> UB: <u>25</u> LB0: <u>25</u> LB: <u>25</u>

LBWithCut: $\underline{25}$ NodeCut: $\underline{0}$

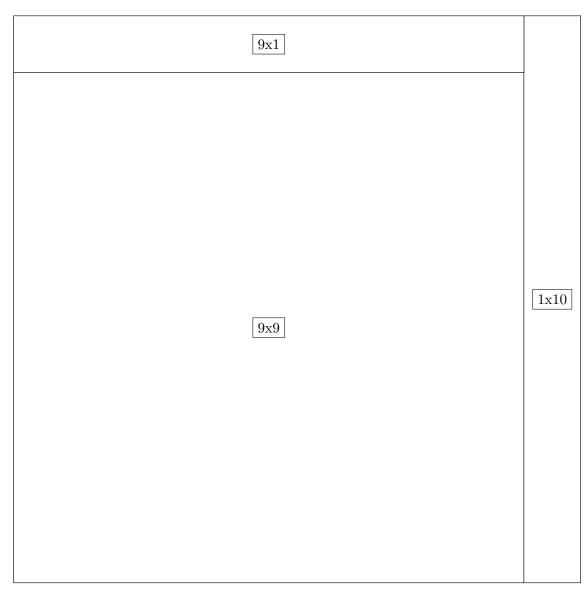
ExtendedNodeCnt: $\underline{\mathbf{1}}$

GenNodeCnt: $\underline{\mathbf{1}}$ PrimalNode: $\underline{\mathbf{0}}$ ColumnCount: $\underline{\mathbf{25}}$ TotalCutCount: $\underline{\mathbf{0}}$ RootCutCount: $\underline{\mathbf{0}}$ LPSolverCnt: $\underline{\mathbf{1}}$ PricingSolverCnt: $\underline{\mathbf{0}}$ BranchAndBoundNum: $\underline{\mathbf{1}}$

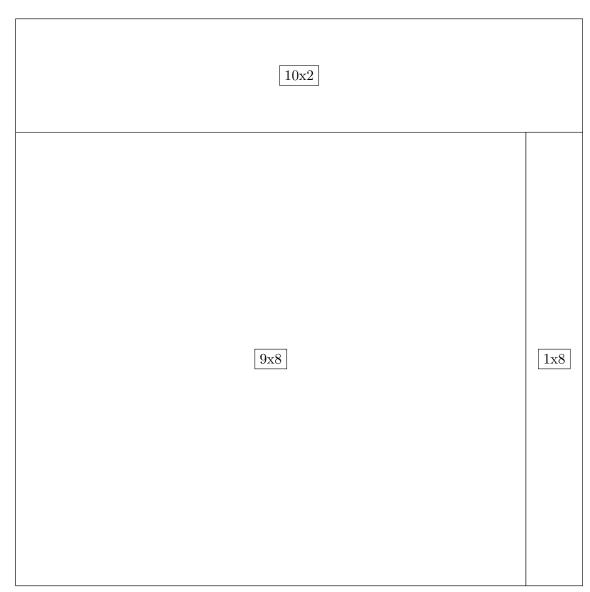
isOpt: $\underline{\mathbf{true}}$

TimeOnInitSolution: $\underline{120.010 \text{ s}}$

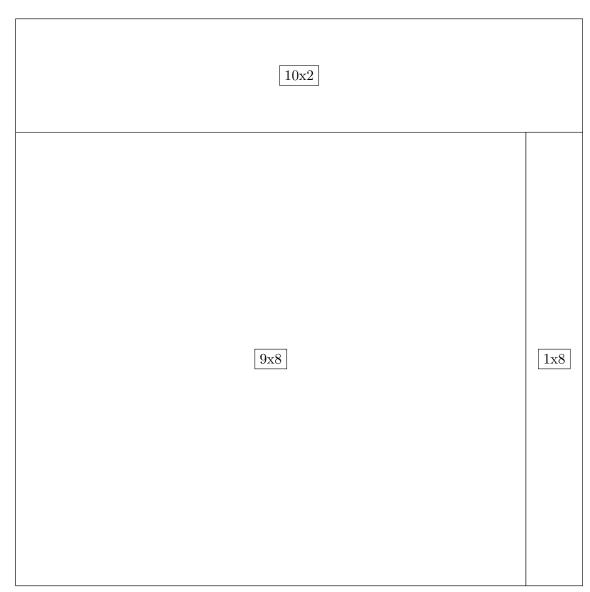
TimeOnPrimal: 0.000 sTimeOnPricing: 0.000 sTimeOnRmp: 0.062 sTotalTime: 120.135 s



$$\begin{array}{l} w = 9 \ , \ h = 9 \ , \ x = 0 \ , \ y = 0 \ , \ v = 81 \\ w = 1 \ , \ h = 10 \ , \ x = 9 \ , \ y = 0 \ , \ v = 10 \\ w = 9 \ , \ h = 1 \ , \ x = 0 \ , \ y = 9 \ , \ v = 9 \end{array}$$



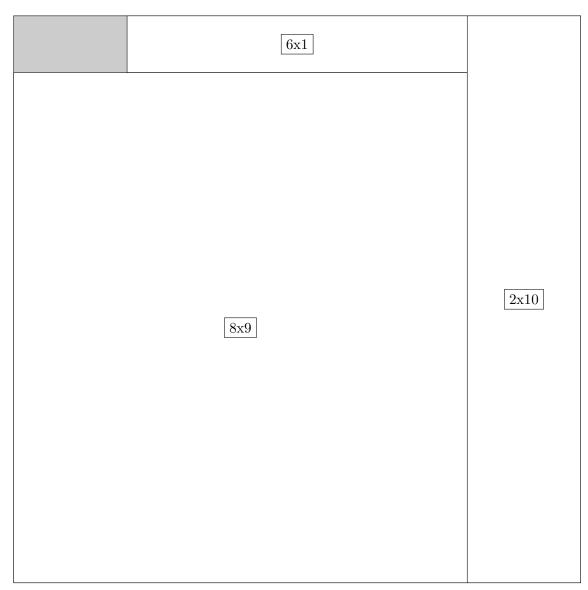
$$\begin{array}{l} w = 9 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 72 \\ w = 10 \ , \ h = 2 \ , \ x = 0 \ , \ y = 8 \ , \ v = 20 \\ w = 1 \ , \ h = 8 \ , \ x = 9 \ , \ y = 0 \ , \ v = 8 \end{array}$$



$$\begin{array}{l} w = 9 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 72 \\ w = 10 \ , \ h = 2 \ , \ x = 0 \ , \ y = 8 \ , \ v = 20 \\ w = 1 \ , \ h = 8 \ , \ x = 9 \ , \ y = 0 \ , \ v = 8 \end{array}$$

8x2	
9x8	1x8

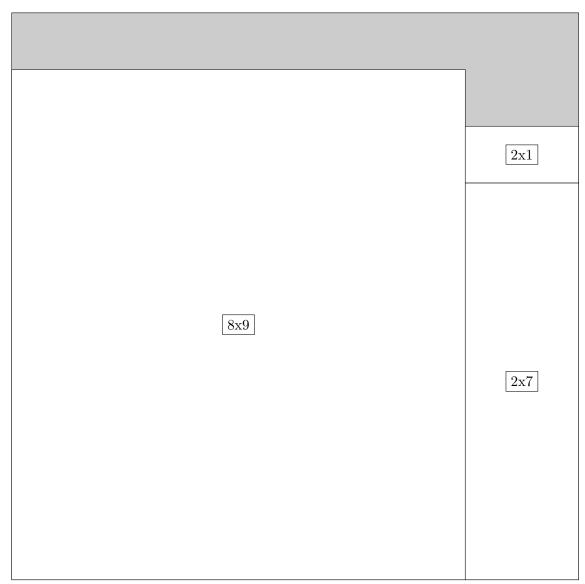
$$\begin{array}{l} w = 9 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 72 \\ w = 8 \ , \ h = 2 \ , \ x = 2 \ , \ y = 8 \ , \ v = 16 \\ w = 1 \ , \ h = 8 \ , \ x = 9 \ , \ y = 0 \ , \ v = 8 \end{array}$$



w = 8, h = 9, x = 0, y = 0, v = 72

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

 \mathbf{w} =6 , h =1 , x =2 , y =9 , v =6



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

$$\mathbf{w}$$
 =2 , h =7 , x =8 , y =0 , v =14

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



3x1		[7x2]	
	8x8		2x8

$$w=8$$
 , $h=8$, $x=0$, $y=0$, $v=64$

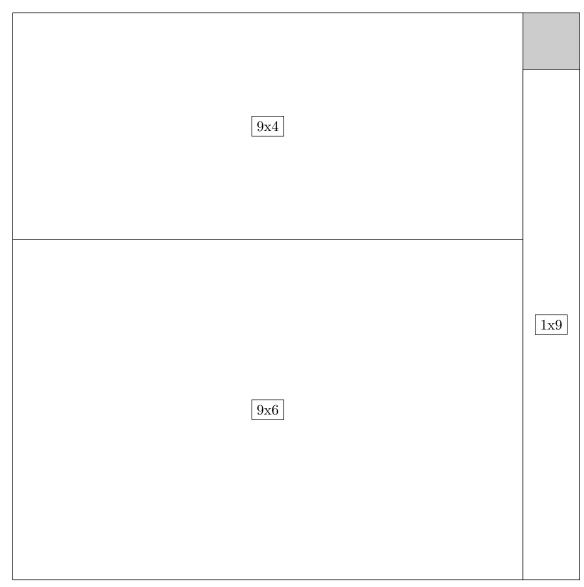
$$\le =2$$
 , h =8 , x =8 , y =0 , v =
16

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

$$\mathbf{w}$$
 =3 , h =1 , x =0 , y =8 , v =3

7x	2
7x8	3x8

 $\begin{array}{l} w = 7 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 56 \\ w = 3 \ , \ h = 8 \ , \ x = 7 \ , \ y = 0 \ , \ v = 24 \\ w = 7 \ , \ h = 2 \ , \ x = 3 \ , \ y = 8 \ , \ v = 14 \end{array}$



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



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

	[4x1]
6x9	4x9

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

w = 4, h = 1, x = 6, y = 9, v = 4

	3x1
[7x3]	
	3x9
7x7	

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

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

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

	8x3	
		3x1
7x7		3x3
		3x3

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

$$\le =8$$
 , h =3 , x =2 , y =7 , v =24

$$w = 3$$
, $h = 1$, $x = 7$, $y = 6$, $v = 3$

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

1x3		8x4	
	7x6		3x6

 $\begin{array}{l} w = 7 \ , \ h = 6 \ , \ x = 0 \ , \ y = 0 \ , \ v = 42 \\ w = 8 \ , \ h = 4 \ , \ x = 2 \ , \ y = 6 \ , \ v = 32 \\ w = 3 \ , \ h = 6 \ , \ x = 7 \ , \ y = 0 \ , \ v = 18 \\ w = 1 \ , \ h = 3 \ , \ x = 0 \ , \ y = 6 \ , \ v = 3 \end{array}$

	6x3
6x7	4x7

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

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

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

5x2	[5x3]
6x7	4x7

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

w =5 , h =3 , x =5 , y =7 , v = 15

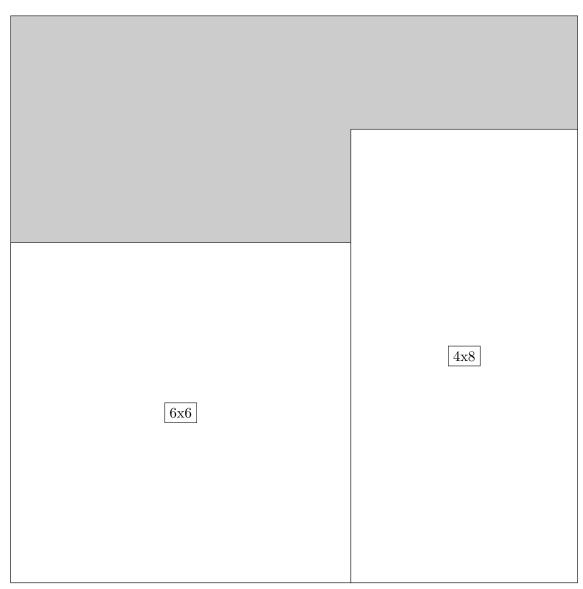
 \mathbf{w} =5 , h =2 , x =0 , y =7 , v = 10

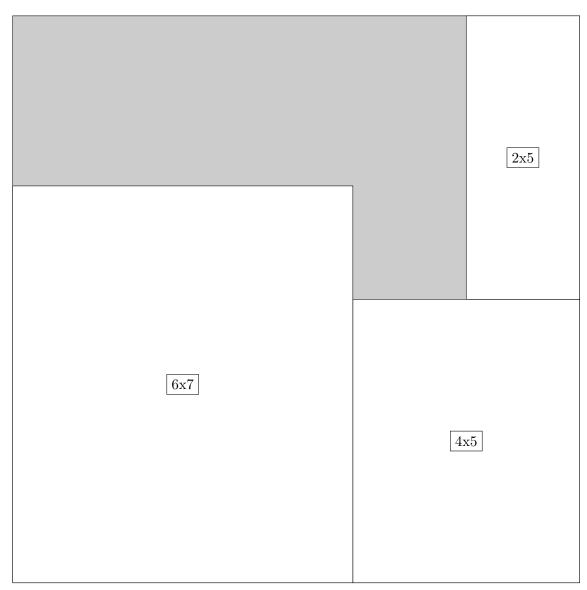
9x2	
6x7	4x7

$$\begin{array}{l} w=6 \ , \ h=7 \ , \ x=0 \ , \ y=0 \ , \ v=42 \\ w=4 \ , \ h=7 \ , \ x=6 \ , \ y=0 \ , \ v=28 \\ w=9 \ , \ h=2 \ , \ x=0 \ , \ y=7 \ , \ v=18 \end{array}$$

3x4		7x4	
63	z6	4x6	

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

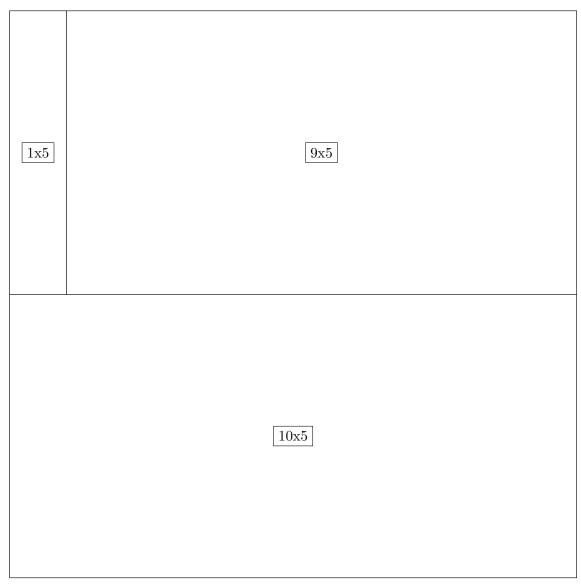




w=4 , h=5 , x=6 , y=0 , v=20

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

 \mathbf{w} =2 , h =5 , x =8 , y =5 , v =10



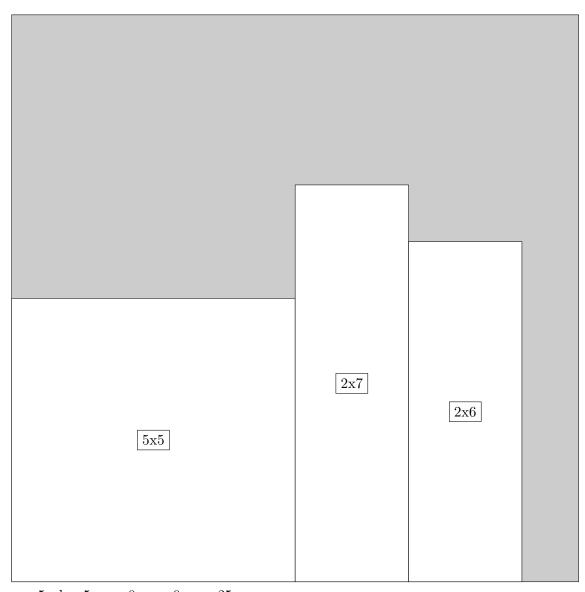
 $\begin{array}{l} w = \! 10 \ , \ h = \! 5 \ , \ x = \! 0 \ , \ y = \! 0 \ , \ v = \! 50 \\ w = \! 9 \ , \ h = \! 5 \ , \ x = \! 1 \ , \ y = \! 5 \ , \ v = \! 45 \\ w = \! 1 \ , \ h = \! 5 \ , \ x = \! 0 \ , \ y = \! 5 \ , \ v = \! 5 \end{array}$

5x2	$5\mathrm{x}4$
[5x8]	5x6

$$\begin{array}{l} w = 5 \ , \, h = 8 \ , \, x = 0 \ , \, y = 0 \ , \, v = \!\! 40 \\ w = \!\! 5 \ , \, h = \!\! 6 \ , \, x = \!\! 5 \ , \, y = \!\! 0 \ , \, v = \!\! 30 \end{array}$$

$$w$$
 =5 , h =4 , x =5 , y =6 , v =20

$$\mathbf{w}=\!5$$
 , $\mathbf{h}=\!2$, $\mathbf{x}=\!0$, $\mathbf{y}=\!8$, $\mathbf{v}=\!10$



 \mathbf{w} =5 , h =5 , x =0 , y =0 , v = 25 $\begin{array}{c} w = 2 \; , \; h = 7 \; , \; x = 5 \; , \; y = 0 \; , \; v = 14 \\ w = 2 \; , \; h = 6 \; , \; x = 7 \; , \; y = 0 \; , \; v = 12 \end{array}$

