${\bf ClassName:}~{\bf Class_01.2bp\text{-}12}$

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

TypeNum: <u>32</u> Num: <u>40</u> OutS: <u>1700</u> InS: <u>1390</u> Rate: <u>0.818</u> UB: <u>17</u> LB0: <u>16</u> LB: <u>17</u>

LBWithCut: $\underline{17}$ NodeCut: $\underline{0}$

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

GenNodeCnt: $\underline{\mathbf{1}}$ PrimalNode: $\underline{\mathbf{0}}$ ColumnCount: $\underline{\mathbf{40}}$ TotalCutCount: $\underline{\mathbf{0}}$ RootCutCount: $\underline{\mathbf{0}}$ LPSolverCnt: $\underline{\mathbf{24}}$ PricingSolverCnt: $\underline{\mathbf{24}}$ BranchAndBoundNum: $\underline{\mathbf{1}}$

isOpt: **true**

 $\begin{array}{ll} {\rm TimeOnInitSolution:} \ \underline{0.030 \ s} \\ {\rm TimeOnPrimal:} \ \underline{0.000 \ s} \\ {\rm TimeOnPricing:} \ \underline{0.780 \ s} \\ {\rm TimeOnRmp:} \ \underline{0.094 \ s} \\ {\rm TotalTime:} \ \underline{0.983 \ s} \end{array}$



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



 \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



| 3x2 | | 7x2 | |
|-----|-----|-----|-----|
| | 8x8 | | 2x8 |

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

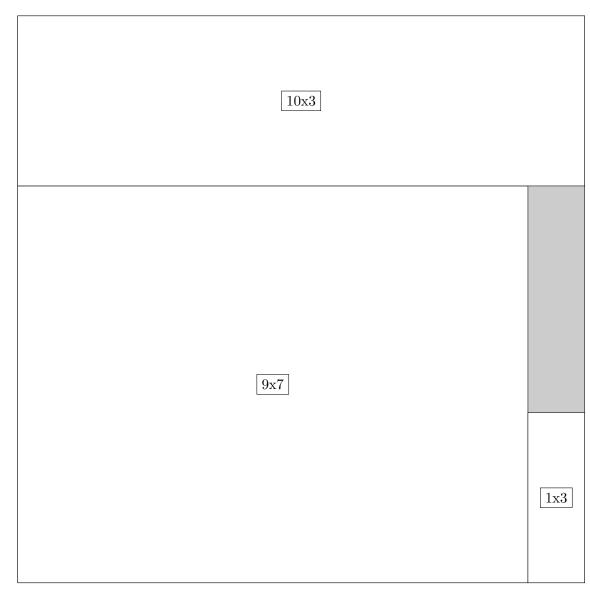
$$\le =2$$
 , h =8 , x =8 , y =0 , v =
16

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

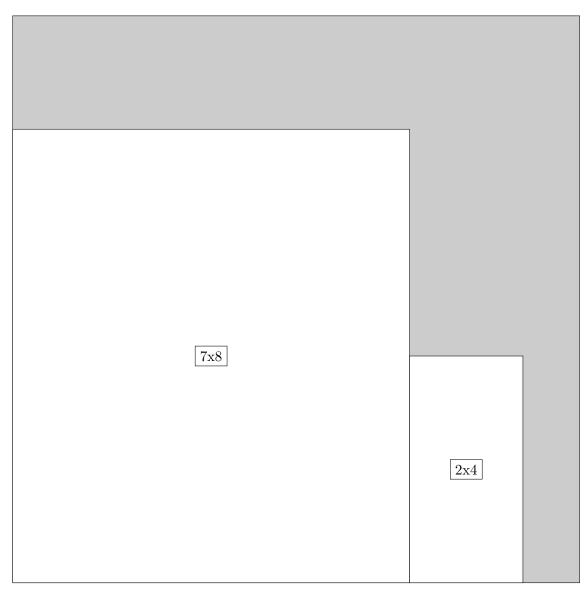
$$\mathbf{w}$$
 =3 , h =2 , x =0 , y =8 , v =6

| 9x3 | 1x3 |
|----------------|-----|
| $9\mathrm{x}7$ | |
| | |

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

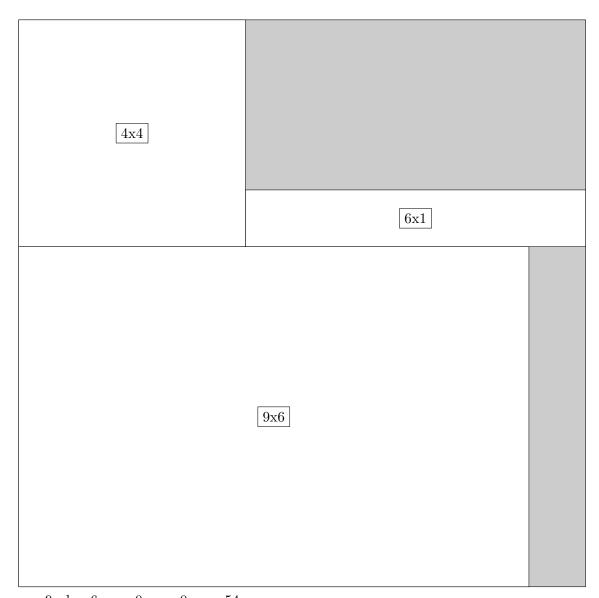


$$\begin{array}{l} w = 9 \ , \ h = 7 \ , \ x = 0 \ , \ y = 0 \ , \ v = 63 \\ w = 10 \ , \ h = 3 \ , \ x = 0 \ , \ y = 7 \ , \ v = 30 \\ w = 1 \ , \ h = 3 \ , \ x = 9 \ , \ y = 0 \ , \ v = 3 \end{array}$$



| | [5x1] | |
|-----|-------|--|
| 5x4 | 5x3 | |
| | | |
| 9x6 | | |
| | | |

$$\begin{array}{l} w = 9 \ , \, h = 6 \ , \, x = 0 \ , \, y = 0 \ , \, v = 54 \\ w = 5 \ , \, h = 4 \ , \, x = 0 \ , \, y = 6 \ , \, v = 20 \\ w = 5 \ , \, h = 3 \ , \, x = 5 \ , \, y = 6 \ , \, v = 15 \\ w = 5 \ , \, h = 1 \ , \, x = 5 \ , \, y = 9 \ , \, v = 5 \end{array}$$

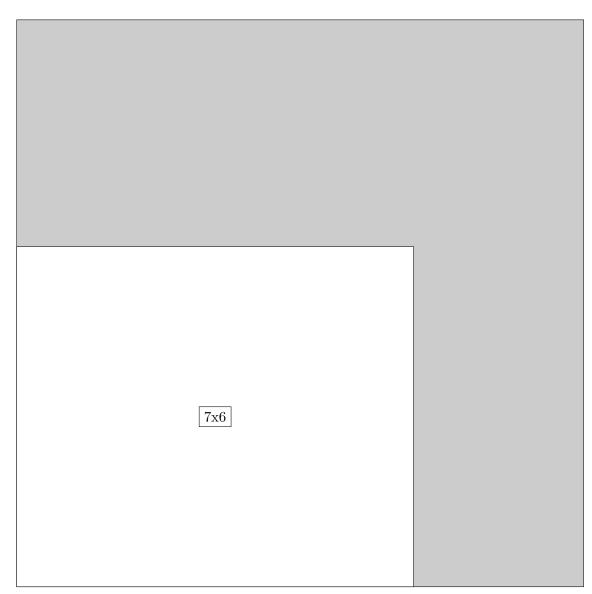


$$\begin{array}{l} w = 9 \ , \ h = 6 \ , \ x = 0 \ , \ y = 0 \ , \ v = 54 \\ w = 4 \ , \ h = 4 \ , \ x = 0 \ , \ y = 6 \ , \ v = 16 \\ w = 6 \ , \ h = 1 \ , \ x = 4 \ , \ y = 6 \ , \ v = 6 \end{array}$$

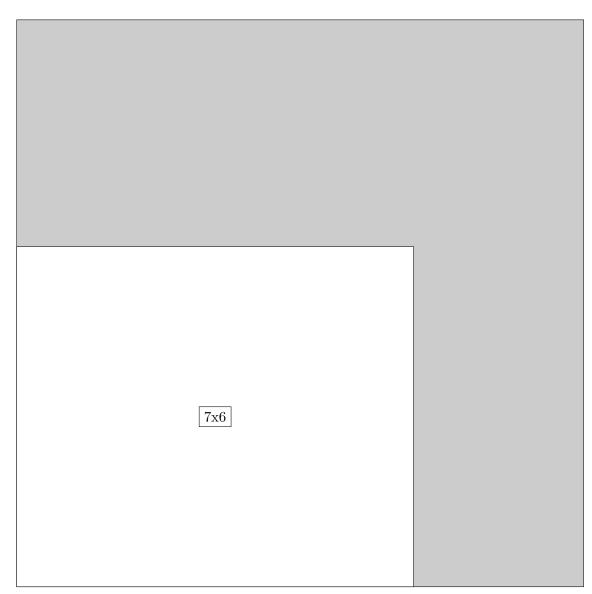
| 8x2 | |
|-----|-----|
| 8x6 | 2x8 |

 $\begin{array}{l} w = 8 \ , \ h = 6 \ , \ x = 0 \ , \ y = 0 \ , \ v = 48 \\ w = 8 \ , \ h = 2 \ , \ x = 0 \ , \ y = 6 \ , \ v = 16 \end{array}$

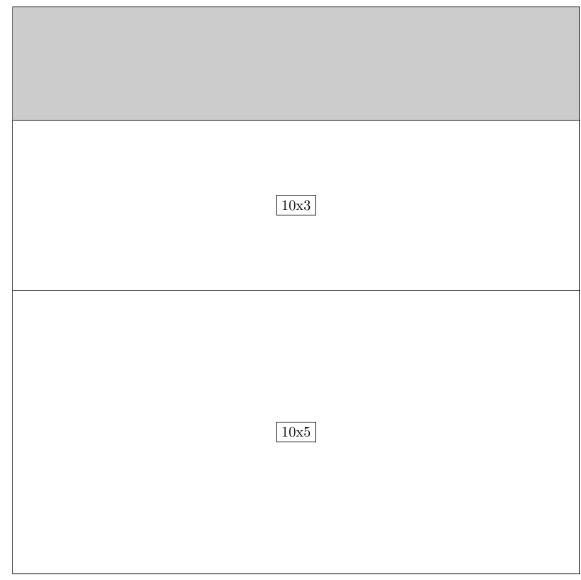
 \mathbf{w} =2 , h =8 , x =8 , y =0 , v = 16

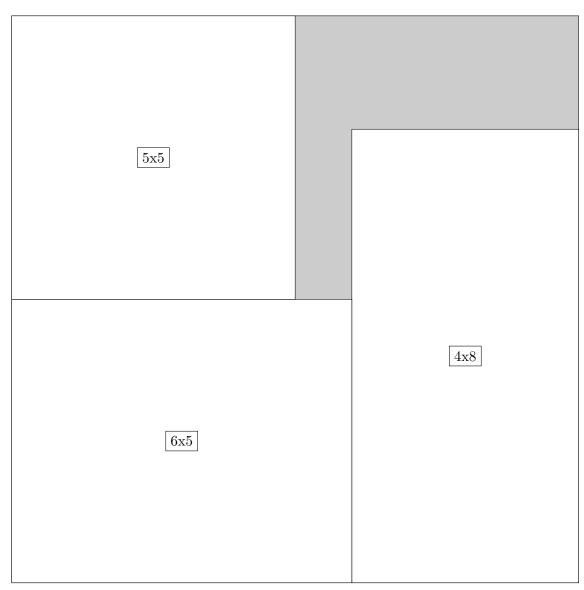


 \mathbf{w} =7 , h =6 , x =0 , y =0 , v =42



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

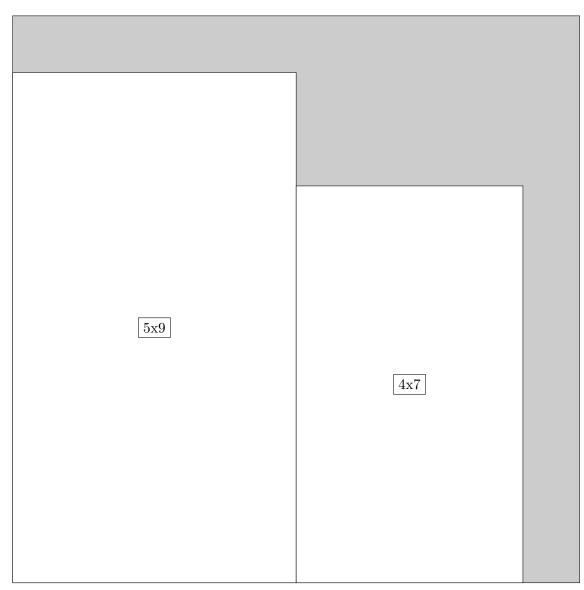




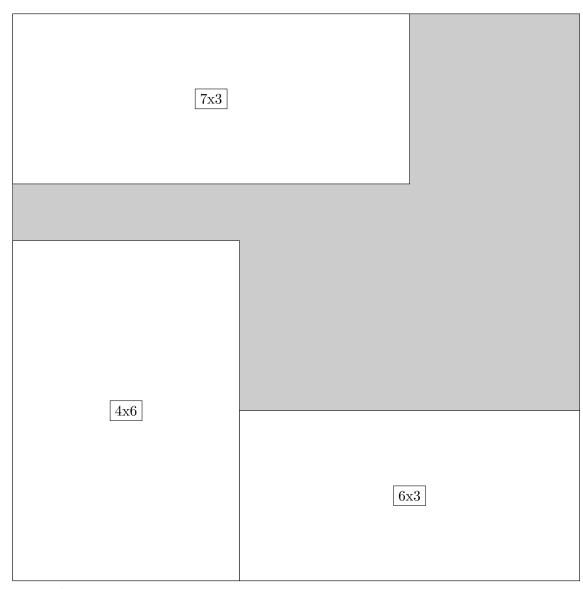
$$w = 4$$
, $h = 8$, $x = 6$, $y = 0$, $v = 32$

$$\mathbf{w}$$
 =6 , h =5 , x =0 , y =0 , v =30

$$\mathbf{w}$$
 =5 , h =5 , x =0 , y =5 , v =25



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



$$\begin{array}{l} w = \! 4 \ , \, h = \! 6 \ , \, x = \! 0 \ , \, y = \! 0 \ , \, v = \! 24 \\ w = \! 7 \ , \, h = \! 3 \ , \, x = \! 0 \ , \, y = \! 7 \ , \, v = \! 21 \\ w = \! 6 \ , \, h = \! 3 \ , \, x = \! 4 \ , \, y = \! 0 \ , \, v = \! 18 \end{array}$$