$ClassName: {\bf Class_02.2bp\text{-}31}$

 $\begin{array}{ccc} \text{BinSize: } \underline{30} & \overline{\times} & \underline{30} \\ \text{ReduceSize: } \underline{30} & \times & \underline{30} \end{array}$

TypeNum: <u>57</u> Num: <u>80</u> OutS: <u>2700</u> InS: <u>2407</u> Rate: <u>0.891</u>

UB: <u>3</u> LB0: <u>3</u> LB: **3**

LBWithCut: $\underline{\mathbf{3}}$ NodeCut: $\underline{\mathbf{0}}$

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

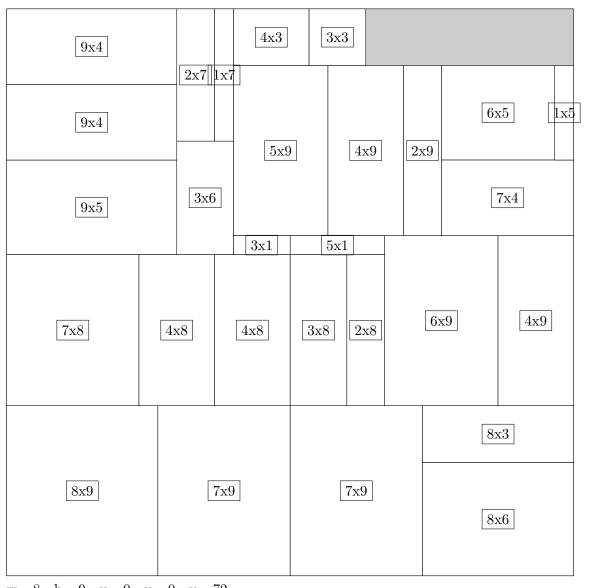
GenNodeCnt: $\underline{\mathbf{1}}$ PrimalNode: $\underline{\mathbf{0}}$ ColumnCount: $\underline{\mathbf{3}}$ TotalCutCount: $\underline{\mathbf{0}}$ RootCutCount: $\underline{\mathbf{0}}$ LPSolverCnt: $\underline{\mathbf{1}}$ PricingSolverCnt: $\underline{\mathbf{0}}$ BranchAndBoundNum: $\underline{\mathbf{1}}$

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

 $\begin{array}{ll} {\rm TimeOnInitSolution:} \ \underline{0.000 \ s} \\ {\rm TimeOnPrimal:} \ \underline{0.000 \ s} \\ {\rm TimeOnPricing:} \ \underline{0.000 \ s} \\ {\rm TimeOnRmp:} \ \underline{0.078 \ s} \\ {\rm TotalTime:} \ \underline{0.156 \ s} \end{array}$

| 9x2 | x10x102x10 7x10 | [10x5] |
|---------|-----------------|--------|
| 9x8 | 7.10 | 10x8 |
| | | |
| 9x10 | 8x10 3x10 | 10x8 |
| [10x10] | 10x10 | 10x9 |

```
\begin{array}{l} w=10\;,\; h=10\;,\; x=0\;,\; y=0\;,\; v=100\\ w=10\;,\; h=10\;,\; x=10\;,\; y=0\;,\; v=100\\ w=10\;,\; h=9\;,\; x=20\;,\; y=0\;,\; v=90\\ w=9\;,\; h=10\;,\; x=0\;,\; y=10\;,\; v=90\\ w=10\;,\; h=8\;,\; x=20\;,\; y=9\;,\; v=80\\ w=10\;,\; h=8\;,\; x=20\;,\; y=17\;,\; v=80\\ w=8\;,\; h=10\;,\; x=9\;,\; y=10\;,\; v=80\\ w=9\;,\; h=8\;,\; x=0\;,\; y=20\;,\; v=72\\ w=7\;,\; h=10\;,\; x=13\;,\; y=20\;,\; v=72\\ w=7\;,\; h=10\;,\; x=13\;,\; y=20\;,\; v=70\\ w=10\;,\; h=5\;,\; x=20\;,\; y=25\;,\; v=50\\ w=3\;,\; h=10\;,\; x=17\;,\; y=10\;,\; v=30\\ w=2\;,\; h=10\;,\; x=11\;,\; y=20\;,\; v=20\\ w=9\;,\; h=2\;,\; x=0\;,\; y=28\;,\; v=18\\ w=1\;,\; h=10\;,\; x=10\;,\; y=20\;,\; v=10\\ w=1\;,\; h=10\;,\; x=9\;,\; y=20\;,\; v=10\\ \end{array}
```



```
w =8, h =9, x =0, y =0, v =72
w =7, h =9, x =8, y =0, v =63
```

$$\mathbf{w}$$
 =7 , h =9 , x =15 , y =0 , v =63

$$w$$
 =7 , h =8 , x =0 , y =9 , v =
56

$$w = 6$$
, $h = 9$, $x = 20$, $y = 9$, $v = 54$

$$w = 8$$
, $h = 6$, $x = 22$, $y = 0$, $v = 48$

$$\le =9$$
 , h =5 , x =0 , y =17 , v =45

$$w = 5$$
, $h = 9$, $x = 12$, $y = 18$, $v = 45$

$$w = 9$$
, $h = 4$, $x = 0$, $y = 22$, $v = 36$

$$w$$
 =4 , h =9 , x =17 , y =18 , v =36

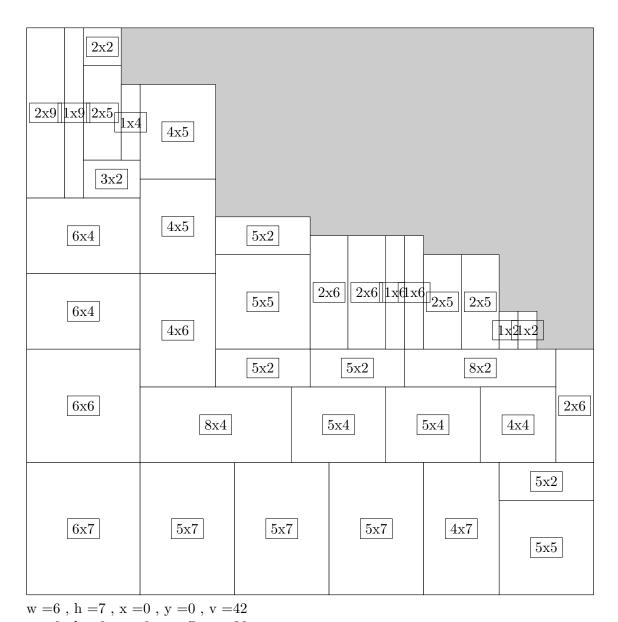
$$w = 4$$
, $h = 8$, $x = 7$, $y = 9$, $v = 32$
 $w = 4$, $h = 8$, $x = 11$, $y = 9$, $v = 32$

$$w = 6$$
, $h = 5$, $x = 23$, $y = 22$, $v = 30$

$$w = 7$$
, $h = 4$, $x = 23$, $y = 18$, $v = 28$

```
\begin{array}{l} w=8 \;,\; h=3 \;,\; x=22 \;,\; y=6 \;,\; v=24 \\ w=3 \;,\; h=8 \;,\; x=15 \;,\; y=9 \;,\; v=24 \\ w=3 \;,\; h=6 \;,\; x=9 \;,\; y=17 \;,\; v=18 \\ w=2 \;,\; h=9 \;,\; x=21 \;,\; y=18 \;,\; v=18 \\ w=2 \;,\; h=8 \;,\; x=18 \;,\; y=9 \;,\; v=16 \\ w=2 \;,\; h=7 \;,\; x=9 \;,\; y=23 \;,\; v=14 \\ w=4 \;,\; h=3 \;,\; x=12 \;,\; y=27 \;,\; v=12 \\ w=3 \;,\; h=3 \;,\; x=16 \;,\; y=27 \;,\; v=9 \\ w=1 \;,\; h=7 \;,\; x=11 \;,\; y=23 \;,\; v=7 \\ w=5 \;,\; h=1 \;,\; x=15 \;,\; y=17 \;,\; v=5 \end{array}
```

 $\begin{array}{l} w = 1 \ , \ h = 5 \ , \ x = 29 \ , \ y = 22 \ , \ v = 5 \\ w = 3 \ , \ h = 1 \ , \ x = 12 \ , \ y = 17 \ , \ v = 3 \end{array}$



$$\begin{array}{l} w=6\;,\; h=6\;,\; x=0\;,\; y=7\;,\; v=36\\ w=5\;,\; h=7\;,\; x=6\;,\; y=0\;,\; v=35\\ w=5\;,\; h=7\;,\; x=11\;,\; y=0\;,\; v=35\\ w=5\;,\; h=7\;,\; x=16\;,\; y=0\;,\; v=35\\ w=8\;,\; h=4\;,\; x=6\;,\; y=7\;,\; v=32\\ w=2\;,\; h=6\;,\; x=28\;,\; y=7\;,\; v=12\\ w=5\;,\; h=5\;,\; x=25\;,\; y=0\;,\; v=25\\ w=5\;,\; h=5\;,\; x=10\;,\; y=13\;,\; v=25\\ w=6\;,\; h=4\;,\; x=0\;,\; y=13\;,\; v=24\\ w=6\;,\; h=4\;,\; x=0\;,\; y=17\;,\; v=24\\ w=6\;,\; h=4\;,\; x=0\;,\; y=17\;,\; v=24\\ w=4\;,\; h=6\;,\; x=6\;,\; y=11\;,\; v=24\\ w=5\;,\; h=4\;,\; x=14\;,\; y=7\;,\; v=20\\ w=5\;,\; h=4\;,\; x=19\;,\; y=7\;,\; v=20\\ w=4\;,\; h=5\;,\; x=6\;,\; y=17\;,\; v=20\\ w=4\;,\; h=5\;,\; x=6\;,\; y=22\;,\; v=20\\ \end{array}$$

```
w = 2, h = 9, x = 0, y = 21, v = 18
w = 8, h = 2, x = 20, y = 11, v = 16
w = 4, h = 4, x = 24, y = 7, v = 16
w = 2, h = 6, x = 15, y = 13, v = 12
w = 4, h = 7, x = 21, y = 0, v = 28
w = 2, h = 6, x = 17, y = 13, v = 12
w = 5, h = 2, x = 25, y = 5, v = 10
w=\!5 , h=\!2 , x=\!15 , y=\!11 , v=\!10
w = 5, h = 2, x = 10, y = 11, v = 10
w = 5, h = 2, x = 10, y = 18, v = 10
w = 2, h = 5, x = 3, y = 23, v = 10
w = 2, h = 5, x = 21, y = 13, v = 10
w = 2, h = 5, x = 23, y = 13, v = 10
w = 1, h = 9, x = 2, y = 21, v = 9
w = 3, h = 2, x = 3, y = 21, v = 6
w = 1, h = 6, x = 19, y = 13, v = 6
w = 1, h = 6, x = 20, y = 13, v = 6
w = 2, h = 2, x = 3, y = 28, v = 4
w = 1, h = 4, x = 5, y = 23, v = 4
w = 1, h = 2, x = 25, y = 13, v = 2
```

w = 1, h = 2, x = 26, y = 13, v = 2