$ClassName: {\bf Class\_03.2bp\text{-}41}$ 

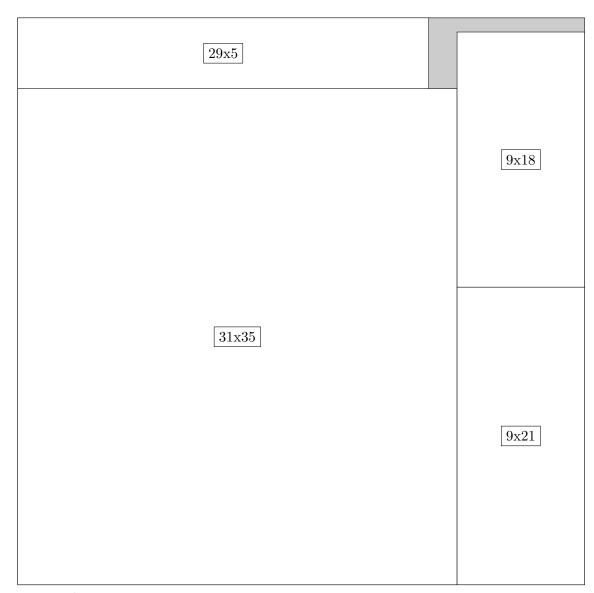
BinSize:  $\underline{40} \times \underline{40}$ ReduceSize:  $\underline{40} \times \underline{40}$ 

TypeNum: <u>96</u>
Num: <u>100</u>
OutS: <u>35200</u>
InS: <u>33240</u>
Rate: <u>0.944</u>
UB: <u>22</u>
LB0: <u>22</u>
LB: <u>22</u>

LBWithCut:  $\underline{22}$ NodeCut:  $\underline{0}$ PrimalNode:  $\underline{0}$ ColumnCount:  $\underline{22}$ TotalCutCount:  $\underline{0}$ RootCutCount:  $\underline{0}$ LPSolverCnt:  $\underline{1}$ PricingSolverCnt:  $\underline{0}$ BranchAndBoundNum:  $\underline{1}$ 

isOpt: **true** 

TimeOnPrimal: 0.000 sTimeOnPricing: 0.000 sTimeOnRmp: 0.078 sTotalTime: 0.141 s



 $\begin{array}{l} w = & 31 \ , \ h = & 35 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 1085 \\ w = & 9 \ , \ h = & 21 \ , \ x = & 31 \ , \ y = & 0 \ , \ v = & 189 \\ w = & 29 \ , \ h = & 5 \ , \ x = & 0 \ , \ y = & 35 \ , \ v = & 145 \\ w = & 9 \ , \ h = & 18 \ , \ x = & 31 \ , \ y = & 21 \ , \ v = & 162 \end{array}$ 

| 31x11              | 4x11 | 3x2<br>5x4 | Į. |
|--------------------|------|------------|----|
| $35 \mathrm{x} 27$ |      | 3x27       |    |

$$w = 35$$
,  $h = 27$ ,  $x = 0$ ,  $y = 0$ ,  $v = 945$ 

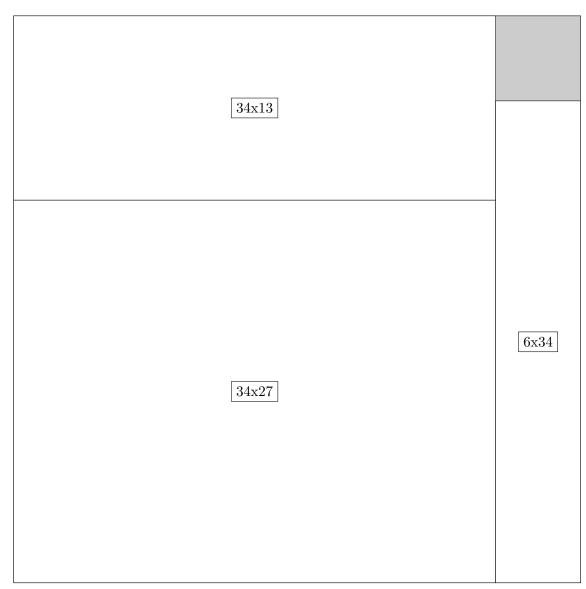
$$\begin{array}{l} w = \! 31 \; , \; h = \! 11 \; , \; x = \! 0 \; , \; y = \! 27 \; , \; v = \! 341 \\ w = \! 3 \; , \; h = \! 27 \; , \; x = \! 35 \; , \; y = \! 0 \; , \; v = \! 81 \end{array}$$

$$w = 3$$
,  $h = 27$ ,  $x = 35$ ,  $y = 0$ ,  $v = 81$ 

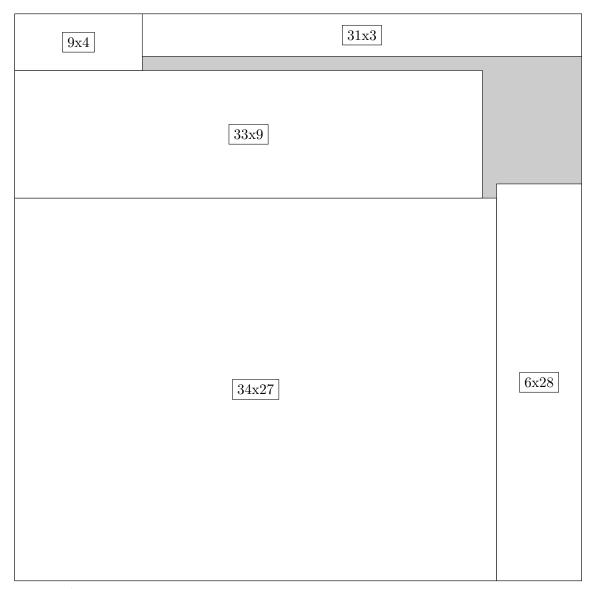
$$w$$
 =4 ,  $h$  =11 ,  $x$  =31 ,  $y$  =27 ,  $v$  =44

$$w$$
 =5 , h =4 , x =35 , y =27 , v =20

$$\le 3$$
 , h =  
2 , x =  
35 , y =  
31 , v =  
6



$$\begin{array}{l} w = \! 34 \; , \; h = \! 27 \; , \; x = \! 0 \; , \; y = \! 0 \; , \; v = \! 918 \\ w = \! 34 \; , \; h = \! 13 \; , \; x = \! 0 \; , \; y = \! 27 \; , \; v = \! 442 \\ w = \! 6 \; , \; h = \! 34 \; , \; x = \! 34 \; , \; y = \! 0 \; , \; v = \! 204 \end{array}$$



$$\begin{array}{l} w = \!\! 34 \; , \; h = \!\! 27 \; , \; x = \!\! 0 \; , \; y = \!\! 0 \; , \; v = \!\! 918 \\ w = \!\! 33 \; , \; h = \!\! 9 \; , \; x = \!\! 0 \; , \; y = \!\! 27 \; , \; v = \!\! 297 \\ w = \!\! 9 \; , \; h = \!\! 4 \; , \; x = \!\! 0 \; , \; y = \!\! 36 \; , \; v = \!\! 36 \\ w = \!\! 6 \; , \; h = \!\! 28 \; , \; x = \!\! 34 \; , \; y = \!\! 0 \; , \; v = \!\! 168 \\ w = \!\! 31 \; , \; h = \!\! 3 \; , \; x = \!\! 9 \; , \; y = \!\! 37 \; , \; v = \!\! 93 \end{array}$$

| $26 \mathrm{x} 10$ | 13x10 |  |
|--------------------|-------|--|
| 29x30              | 10x30 |  |

$$\le =29$$
 , h =30 , x =0 , y =0 , v =870

$$\le =26$$
 ,  $h$  =10 ,  $x$  =0 ,  $y$  =30 ,  $v$  =260

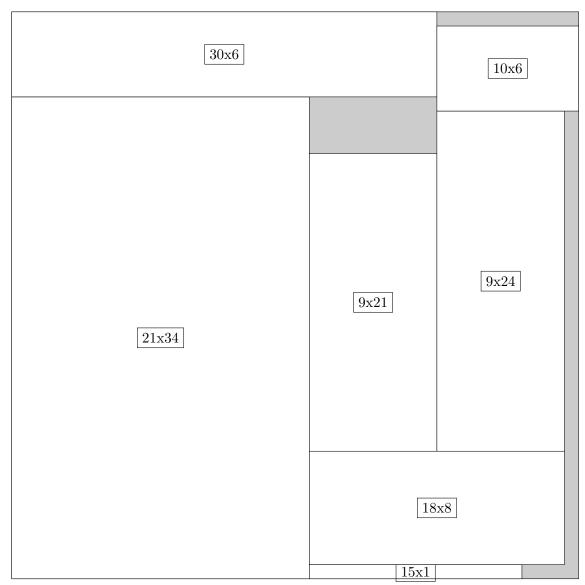
$$\le =10$$
 , h =30 , x =29 , y =0 , v =300

$$\le =13$$
 ,  $h$  =10 ,  $x$  =26 ,  $y$  =30 ,  $v$  =130

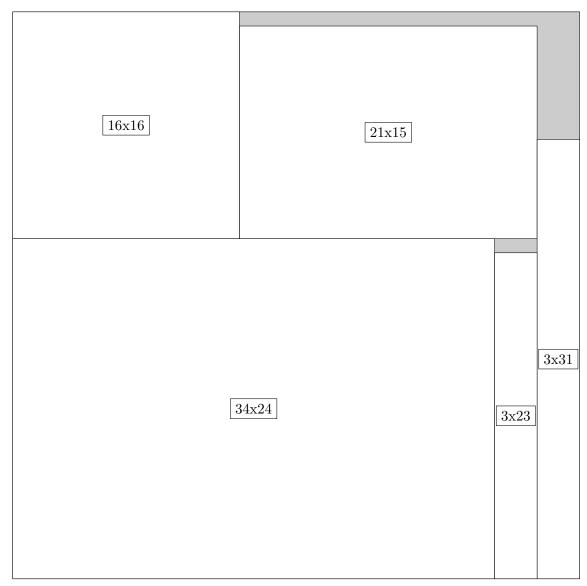
| 19x7  | 21x7  |  |
|-------|-------|--|
| 25x33 | 15x25 |  |

$$w = 15$$
,  $h = 25$ ,  $x = 25$ ,  $y = 0$ ,  $v = 375$ 

$$w$$
 =21 , h =7 , x =19 , y =33 , v =147



```
\begin{array}{l} w = & 21 \;,\; h = & 34 \;,\; x = & 0 \;,\; y = & 0 \;,\; v = & 714 \\ w = & 15 \;,\; h = & 1 \;,\; x = & 21 \;,\; y = & 0 \;,\; v = & 15 \\ w = & 18 \;,\; h = & 8 \;,\; x = & 21 \;,\; y = & 1 \;,\; v = & 144 \\ w = & 9 \;,\; h = & 21 \;,\; x = & 21 \;,\; y = & 9 \;,\; v = & 189 \\ w = & 30 \;,\; h = & 6 \;,\; x = & 0 \;,\; y = & 34 \;,\; v = & 180 \\ w = & 9 \;,\; h = & 24 \;,\; x = & 30 \;,\; y = & 9 \;,\; v = & 216 \\ w = & 10 \;,\; h = & 6 \;,\; x = & 30 \;,\; y = & 33 \;,\; v = & 60 \end{array}
```



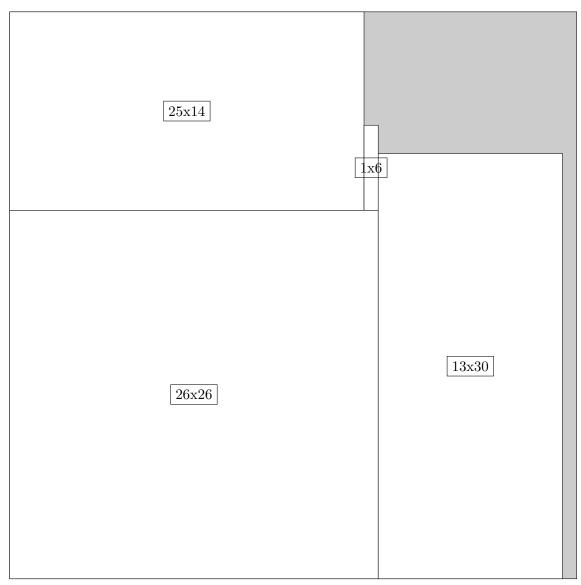
$$\begin{array}{l} w = \!\! 34 \ , \ h = \!\! 24 \ , \ x = \!\! 0 \ , \ y = \!\! 0 \ , \ v = \!\! 816 \\ w = \!\! 21 \ , \ h = \!\! 15 \ , \ x = \!\! 16 \ , \ y = \!\! 24 \ , \ v = \!\! 315 \end{array}$$

$$w = 16$$
,  $h = 16$ ,  $x = 0$ ,  $y = 24$ ,  $v = 256$ 

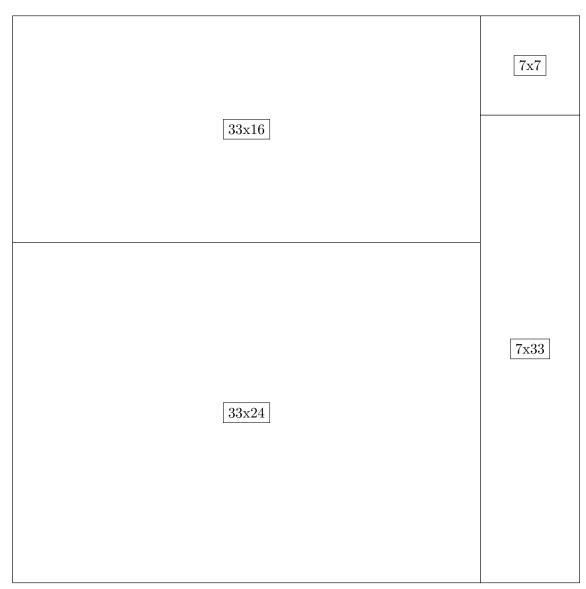
$$W = 10$$
,  $h = 10$ ,  $x = 0$ ,  $y = 24$ ,  $v = 250$ 

$$\mathbf{w}$$
 =3 , h =31 , x =37 , y =0 , v =93

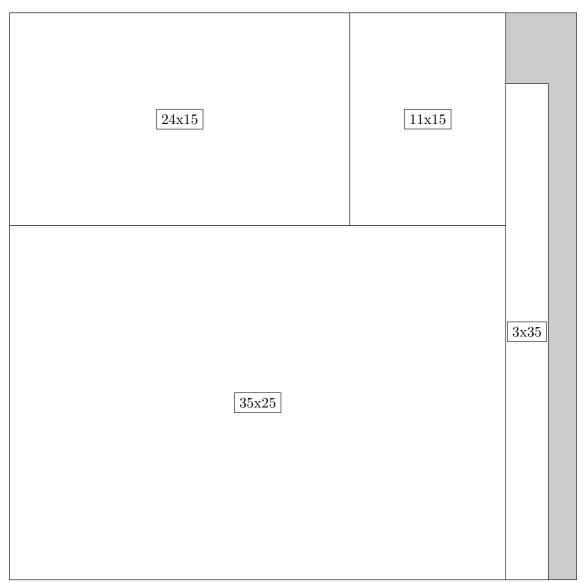
$$w = 3$$
,  $h = 23$ ,  $x = 34$ ,  $y = 0$ ,  $v = 69$ 



 $\begin{array}{l} w = 26 \ , \ h = 26 \ , \ x = 0 \ , \ y = 0 \ , \ v = 676 \\ w = 13 \ , \ h = 30 \ , \ x = 26 \ , \ y = 0 \ , \ v = 390 \\ w = 25 \ , \ h = 14 \ , \ x = 0 \ , \ y = 26 \ , \ v = 350 \\ w = 1 \ , \ h = 6 \ , \ x = 25 \ , \ y = 26 \ , \ v = 6 \end{array}$ 



 $\begin{array}{l} w = \! 33 \; , \; h = \! 24 \; , \; x = \! 0 \; , \; y = \! 0 \; , \; v = \! 792 \\ w = \! 33 \; , \; h = \! 16 \; , \; x = \! 0 \; , \; y = \! 24 \; , \; v = \! 528 \\ w = \! 7 \; , \; h = \! 33 \; , \; x = \! 33 \; , \; y = \! 0 \; , \; v = \! 231 \\ w = \! 7 \; , \; h = \! 7 \; , \; x = \! 33 \; , \; y = \! 33 \; , \; v = \! 49 \end{array}$ 

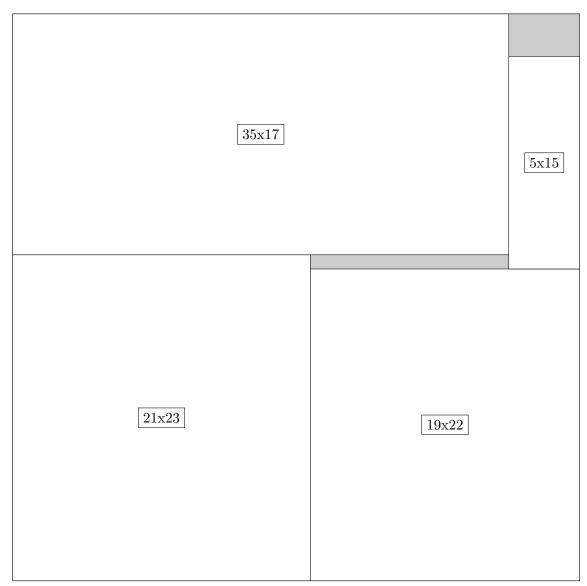


 $\le =35$  , h =25 , x =0 , y =0 , v =875

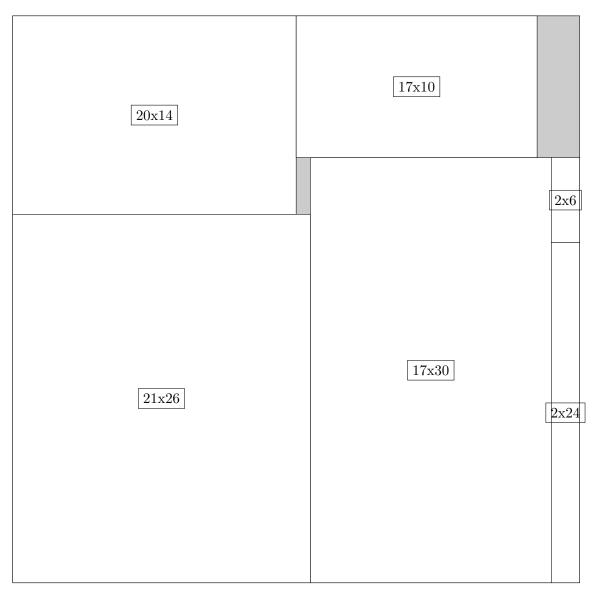
 $\le =24$  , h =15 , x =0 , y =25 , v =360

 $\le =11$  , h =15 , x =24 , y =25 , v =165

 $\mathbf{w}$  =3 , h =35 , x =35 , y =0 , v =105



$$\begin{array}{l} w=21 \ , \ h=23 \ , \ x=0 \ , \ y=0 \ , \ v=483 \\ w=19 \ , \ h=22 \ , \ x=21 \ , \ y=0 \ , \ v=418 \\ w=35 \ , \ h=17 \ , \ x=0 \ , \ y=23 \ , \ v=595 \\ w=5 \ , \ h=15 \ , \ x=35 \ , \ y=22 \ , \ v=75 \end{array}$$



$$w = 17$$
,  $h = 30$ ,  $x = 21$ ,  $y = 0$ ,  $v = 510$ 

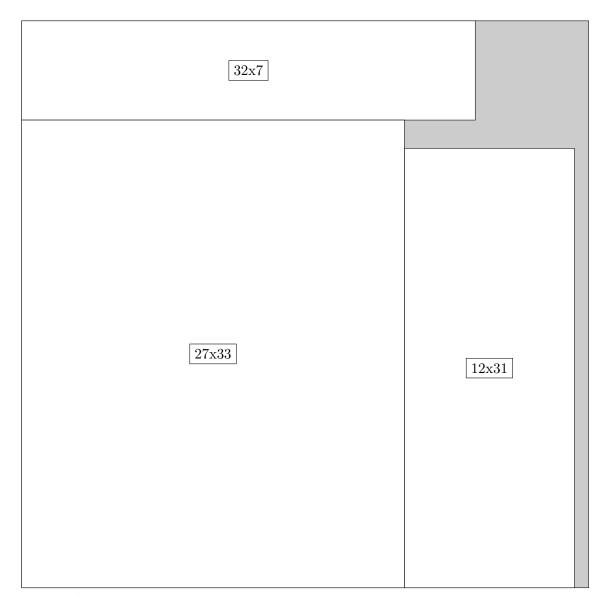
$$\le =20$$
 ,  $h=14$  ,  $x=0$  ,  $y=26$  ,  $v=280$ 

$$\le =17$$
 ,  $h=10$  ,  $x=20$  ,  $y=30$  ,  $v=170$ 

$$\mathbf{w}$$
 =2 , h =24 , x =38 , y =0 , v =48

$$\le =21$$
 ,  $h=26$  ,  $x=0$  ,  $y=0$  ,  $v=546$ 

$$\mathbf{w}$$
 =2 , h =6 , x =38 , y =24 , v =12



$$\begin{array}{l} w = \! 12 \; , \; h = \! 31 \; , \; x = \! 27 \; , \; y = \! 0 \; , \; v = \! 372 \\ w = \! 32 \; , \; h = \! 7 \; , \; x = \! 0 \; , \; y = \! 33 \; , \; v = \! 224 \end{array}$$

$$\le =27$$
 , h =33 , x =0 , y =0 , v =891

| 28x7  |       |
|-------|-------|
| 27x9  | 12x16 |
|       |       |
| 27x24 | 12x24 |
|       |       |

$$\mathbf{w}$$
 =27 ,  $\mathbf{h}$  =24 ,  $\mathbf{x}$  =0 ,  $\mathbf{y}$  =0 ,  $\mathbf{v}$  =648

$$\le =12$$
 ,  $h=24$  ,  $x=27$  ,  $y=0$  ,  $v=288$ 

$$\le =27$$
 , h =9 , x =0 , y =24 , v =243

$$\mathbf{w}$$
 =28 , h =7 , x =0 , y =33 , v =196

$$\mathbf{w}$$
 =12 , h =16 , x =28 , y =24 , v =192

| 34x17              |      | 4x5  |
|--------------------|------|------|
| $24 \mathrm{x} 23$ | 8x23 | 8x23 |

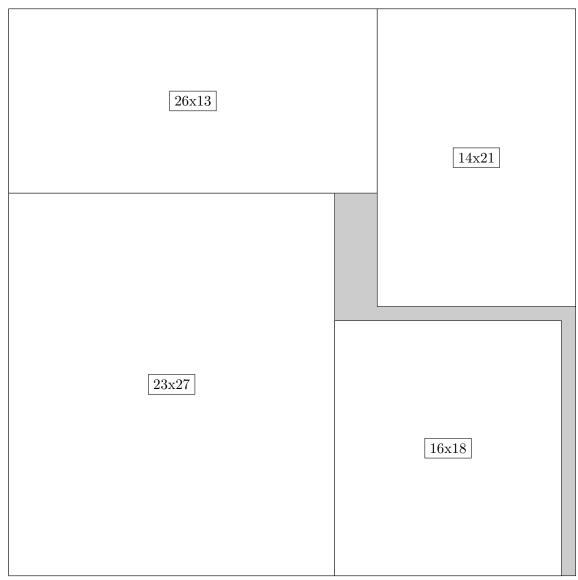
w = 34, h = 17, x = 0, y = 23, v = 578

 $\le =24$  , h =23 , x =0 , y =0 , v =552

 $\le = 8$  , h = 23 , x = 24 , y = 0 , v = 184

 $\le =8$  , h =23 , x =32 , y =0 , v =184

 $\le 4$  , h = 5 , x = 34 , y = 23 , v = 20

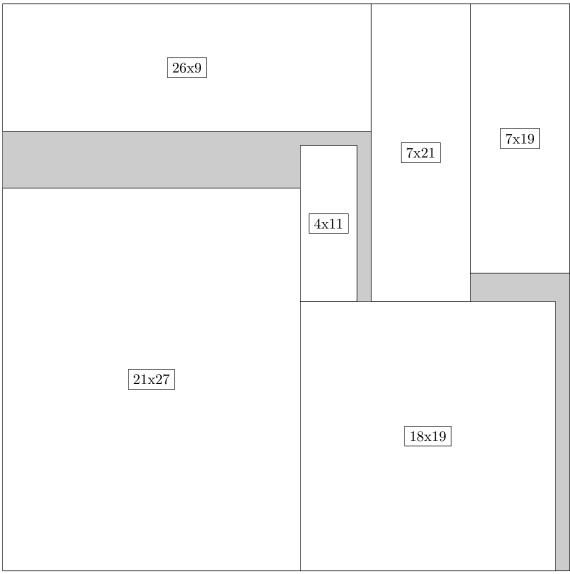


$$\le =23$$
 , h =27 , x =0 , y =0 , v =621

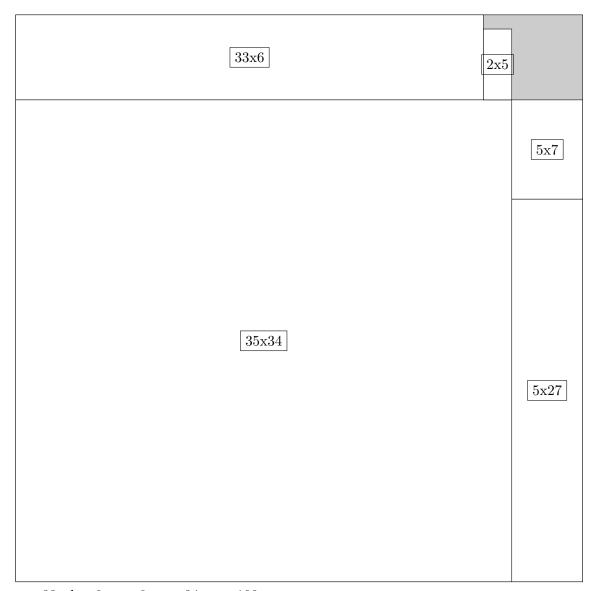
$$\le =26$$
 , h =13 , x =0 , y =27 , v =338

$$\le =14$$
 ,  $h=21$  ,  $x=26$  ,  $y=19$  ,  $v=294$ 

$$\le =16$$
 ,  $h=18$  ,  $x=23$  ,  $y=0$  ,  $v=288$ 



 $\begin{array}{l} w=21 \ , \ h=27 \ , \ x=0 \ , \ y=0 \ , \ v=567 \\ w=18 \ , \ h=19 \ , \ x=21 \ , \ y=0 \ , \ v=342 \\ w=26 \ , \ h=9 \ , \ x=0 \ , \ y=31 \ , \ v=234 \\ w=4 \ , \ h=11 \ , \ x=21 \ , \ y=19 \ , \ v=44 \\ w=7 \ , \ h=21 \ , \ x=26 \ , \ y=19 \ , \ v=147 \\ w=7 \ , \ h=19 \ , \ x=33 \ , \ y=21 \ , \ v=133 \end{array}$ 

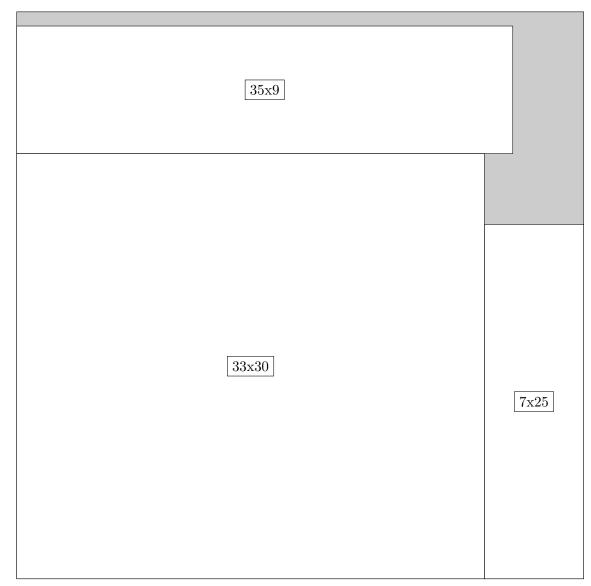


$$\begin{array}{c} w = \!\! 33 \ , \ h = \!\! 6 \ , \ x = \!\! 0 \ , \ y = \!\! 34 \ , \ v = \!\! 198 \\ w = \!\! 5 \ , \ h = \!\! 27 \ , \ x = \!\! 35 \ , \ y = \!\! 0 \ , \ v = \!\! 135 \end{array}$$

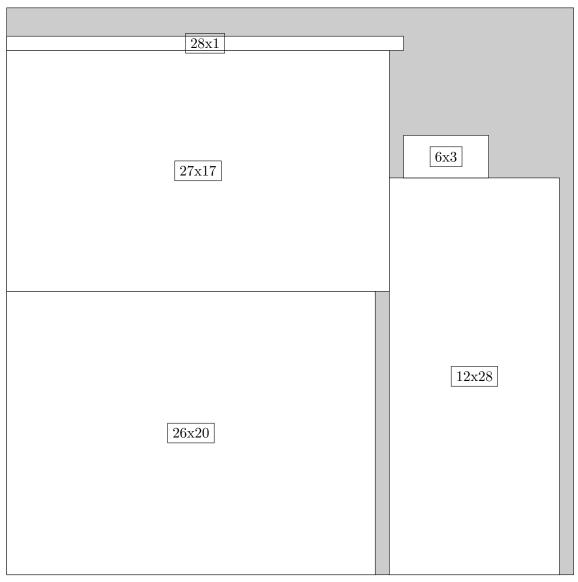
$$w = 5$$
,  $h = 7$ ,  $x = 35$ ,  $y = 27$ ,  $v = 35$ 

$$\mathbf{w}=\!35$$
 ,  $\mathbf{h}=\!34$  ,  $\mathbf{x}=\!0$  ,  $\mathbf{y}=\!0$  ,  $\mathbf{v}=\!1190$ 

$$w = 2$$
,  $h = 5$ ,  $x = 33$ ,  $y = 34$ ,  $v = 10$ 



$$\begin{array}{l} w = 7 \ , \ h = \! 25 \ , \ x = \! 33 \ , \ y = \! 0 \ , \ v = \! 175 \\ w = \! 35 \ , \ h = \! 9 \ , \ x = \! 0 \ , \ y = \! 30 \ , \ v = \! 315 \\ w = \! 33 \ , \ h = \! 30 \ , \ x = \! 0 \ , \ y = \! 0 \ , \ v = \! 990 \end{array}$$



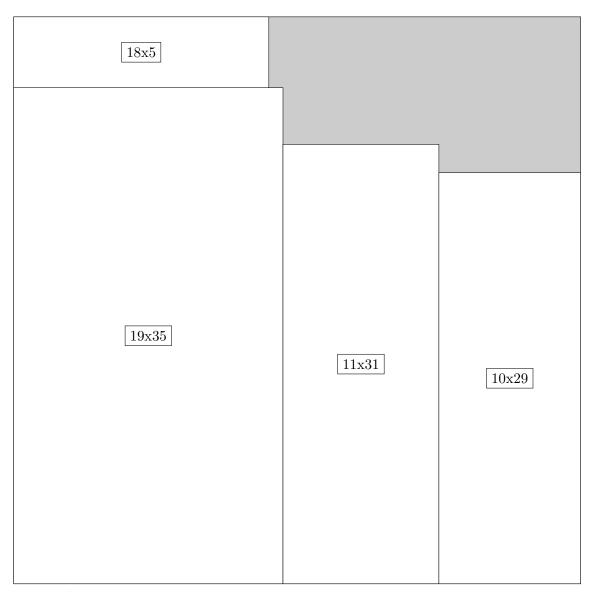
$$w = 26$$
,  $h = 20$ ,  $x = 0$ ,  $y = 0$ ,  $v = 520$ 

$$\le =27$$
 , h =17 , x =0 , y =20 , v =459

$$\le =12$$
 , h =28 , x =27 , y =0 , v =336

$$w = 28$$
,  $h = 1$ ,  $x = 0$ ,  $y = 37$ ,  $v = 28$ 

$$w = 6$$
,  $h = 3$ ,  $x = 28$ ,  $y = 28$ ,  $v = 18$ 



 $\begin{array}{l} w = & 19 \ , \ h = & 35 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 665 \\ w = & 11 \ , \ h = & 31 \ , \ x = & 19 \ , \ y = & 0 \ , \ v = & 341 \\ w = & 10 \ , \ h = & 29 \ , \ x = & 30 \ , \ y = & 0 \ , \ v = & 290 \\ w = & 18 \ , \ h = & 5 \ , \ x = & 0 \ , \ y = & 35 \ , \ v = & 90 \end{array}$