$ClassName: \ Class\_01.2bp\text{-}45$ 

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

TypeNum: <u>66</u> Num: <u>100</u> OutS: <u>3700</u> InS: <u>3378</u> Rate: <u>0.913</u> UB: <u>37</u> LB: <u>37</u>

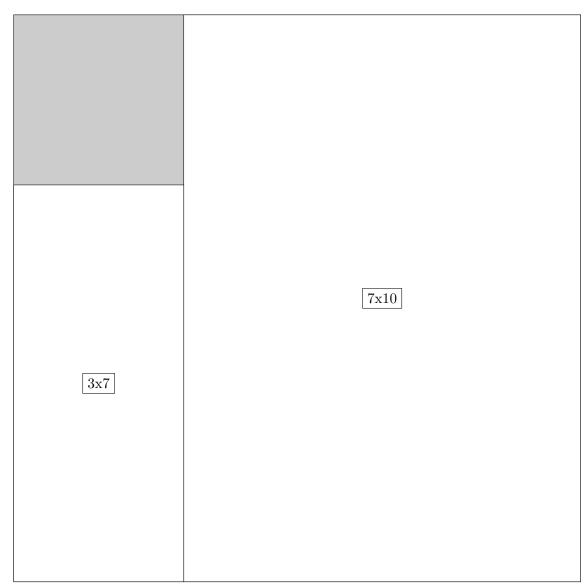
LBWithCut:  $\underline{37}$ NodeCount:  $\underline{0}$ PrimalNode:  $\underline{0}$ ColumnCount:  $\underline{37}$ TotalCutCount:  $\underline{0}$ RootCutCount:  $\underline{0}$ LPSolverCnt:  $\underline{1}$ PricingSolverCnt:  $\underline{0}$ BranchAndBoundNum:  $\underline{1}$ 

isOpt: **true** 

 $\begin{array}{ll} \mbox{TimeOnPrimal: } \underline{0.000 \ s} \\ \mbox{TimeOnPricing: } \underline{0.000 \ s} \\ \mbox{TimeOnRmp: } \underline{0.078 \ s} \\ \mbox{TotalTime: } \underline{0.234 \ s} \end{array}$ 



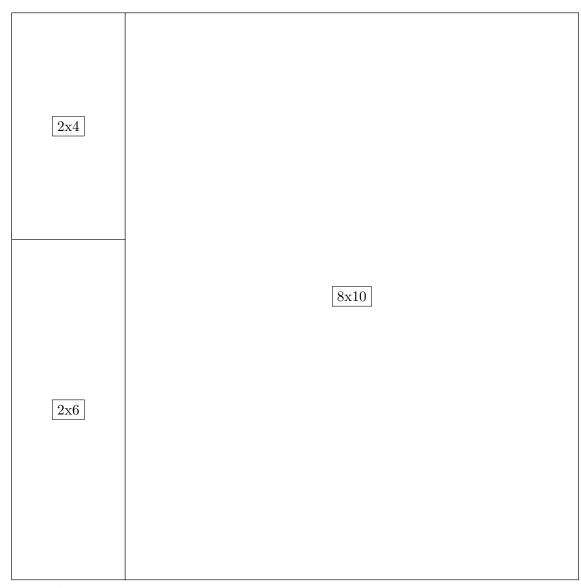
w = 10, h = 8, x = 0, y = 0, v = 80



w =7, h =10, x =3, y =0, v =70 w =3, h =7, x =0, y =0, v =21



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



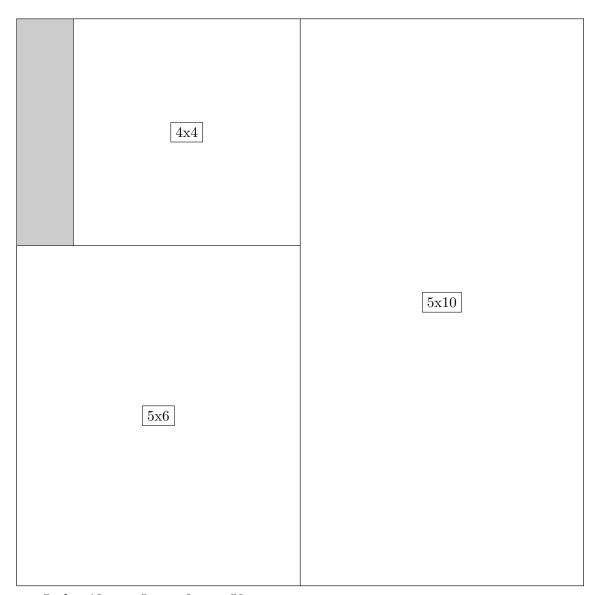
$$\le =8$$
 ,  $h$  =10 ,  $x$  =2 ,  $y$  =0 ,  $v$  =80

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

$$w = 2$$
 ,  $h = 4$  ,  $x = 0$  ,  $y = 6$  ,  $v = 8$ 

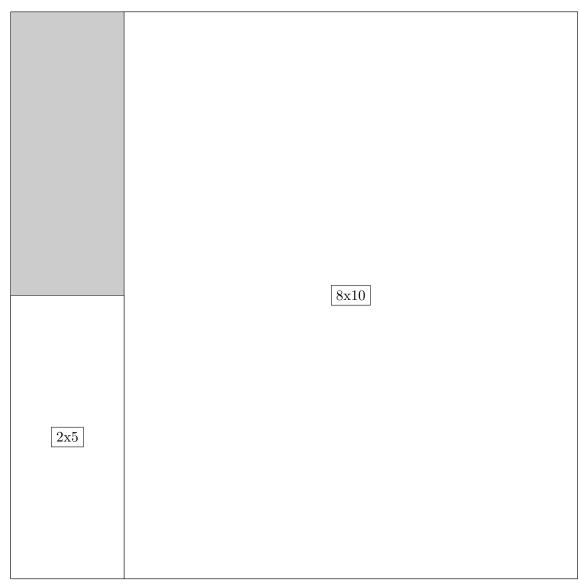


w = 10, h = 8, x = 0, y = 0, v = 80



$$w = 5$$
,  $h = 10$ ,  $x = 5$ ,  $y = 0$ ,  $v = 50$ 

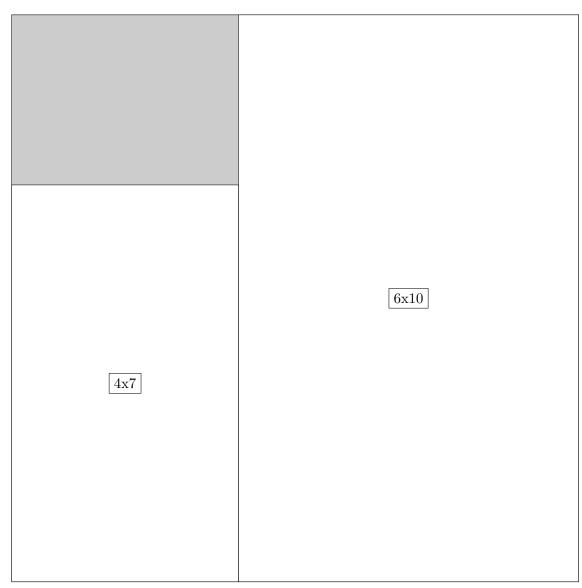
$$\begin{array}{l} w = 5 \ , \ h = 6 \ , \ x = 0 \ , \ y = 0 \ , \ v = 30 \\ w = 4 \ , \ h = 4 \ , \ x = 1 \ , \ y = 6 \ , \ v = 16 \end{array}$$



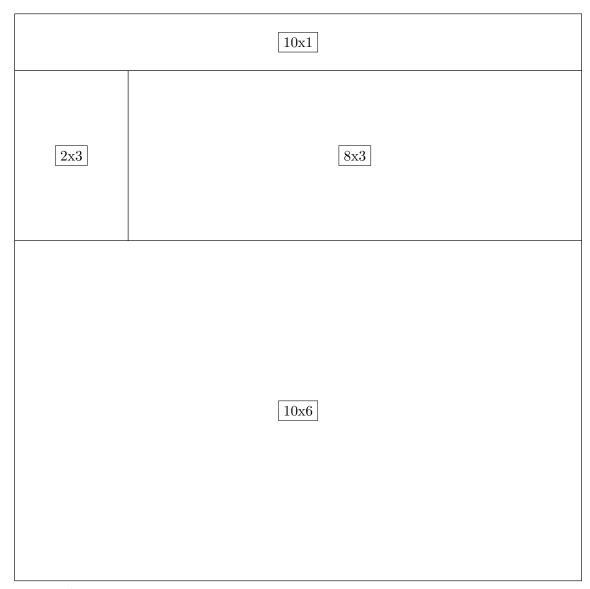
w =8, h =10, x =2, y =0, v =80 w =2, h =5, x =0, y =0, v =10



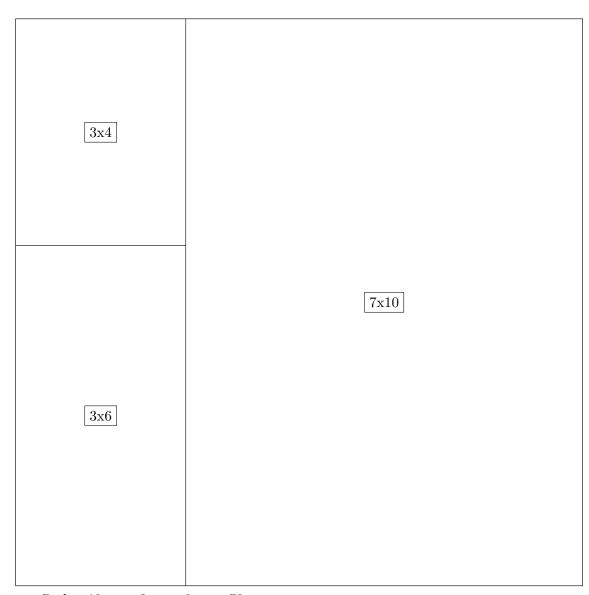
w = 10, h = 8, x = 0, y = 0, v = 80



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



$$\begin{array}{l} w = \! 10 \; , \; h = \! 6 \; , \; x = \! 0 \; , \; y = \! 0 \; , \; v = \! 60 \\ w = \! 8 \; , \; h = \! 3 \; , \; x = \! 2 \; , \; y = \! 6 \; , \; v = \! 24 \\ w = \! 2 \; , \; h = \! 3 \; , \; x = \! 0 \; , \; y = \! 6 \; , \; v = \! 6 \\ w = \! 10 \; , \; h = \! 1 \; , \; x = \! 0 \; , \; y = \! 9 \; , \; v = \! 10 \end{array}$$

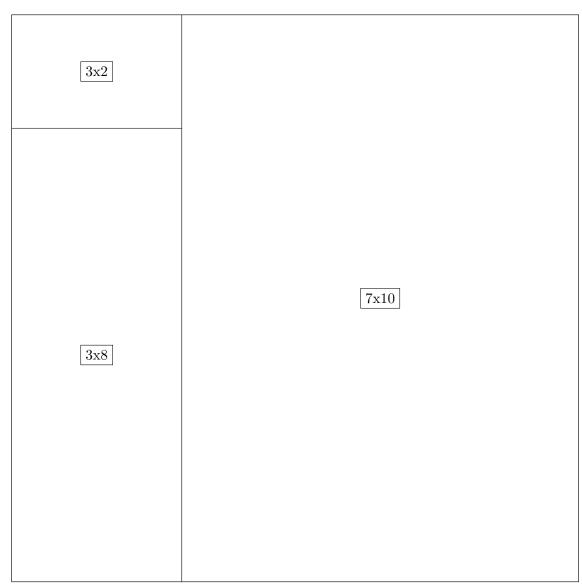


$$\begin{array}{l} w = 7 \ , \ h = \! 10 \ , \ x = \! 3 \ , \ y = \! 0 \ , \ v = \! 70 \\ w = \! 3 \ , \ h = \! 6 \ , \ x = \! 0 \ , \ y = \! 0 \ , \ v = \! 18 \end{array}$$

 $\mathbf{w}$  =3 , h =4 , x =0 , y =6 , v =12

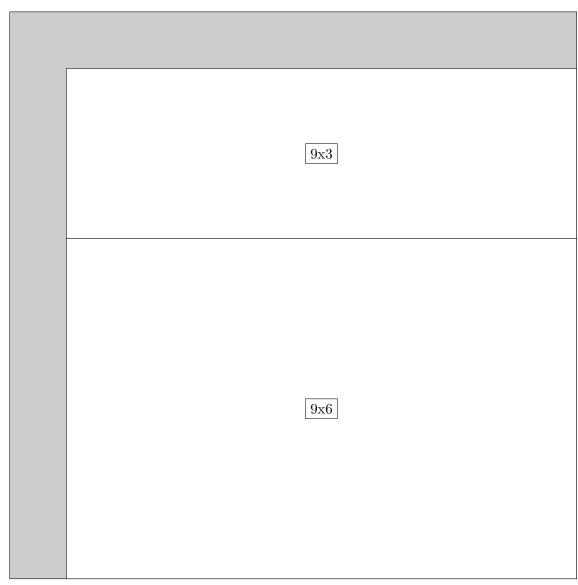
| 4x10 | 6x10 |
|------|------|
|      |      |
|      |      |

w =6, h =10, x =4, y =0, v =60 w =4, h =10, x =0, y =0, v =40



$$\begin{array}{l} w = 7 \ , \ h = \! 10 \ , \ x = \! 3 \ , \ y = \! 0 \ , \ v = \! 70 \\ w = \! 3 \ , \ h = \! 8 \ , \ x = \! 0 \ , \ y = \! 0 \ , \ v = \! 24 \\ w = \! 3 \ , \ h = \! 2 \ , \ x = \! 0 \ , \ y = \! 8 \ , \ v = \! 6 \end{array}$$





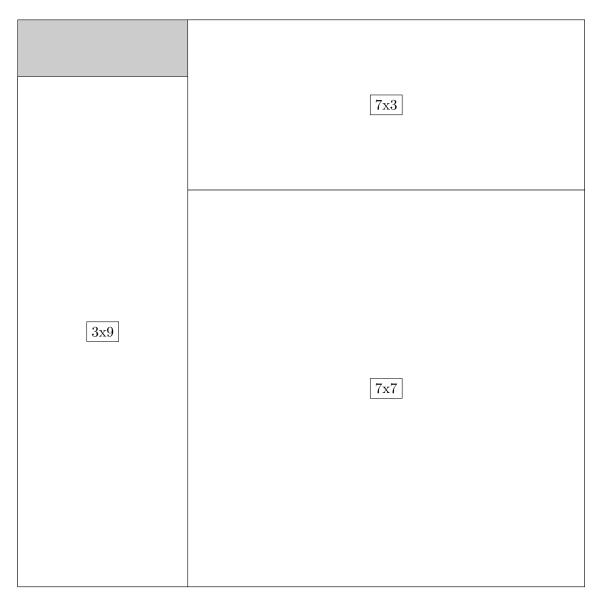
$$\begin{array}{c} w = 9 \ , \ h = 6 \ , \ x = 1 \ , \ y = 0 \ , \ v = 54 \\ w = 9 \ , \ h = 3 \ , \ x = 1 \ , \ y = 6 \ , \ v = 27 \end{array}$$

|     | 9x6 |     |
|-----|-----|-----|
| 4x4 |     | 6x4 |

 $\begin{array}{l} w=6 \ , \, h=4 \ , \, x=4 \ , \, y=0 \ , \, v=24 \\ w=4 \ , \, h=4 \ , \, x=0 \ , \, y=0 \ , \, v=16 \\ w=9 \ , \, h=6 \ , \, x=1 \ , \, y=4 \ , \, v=54 \end{array}$ 

|     | 7x1 |
|-----|-----|
| 1x3 | 9x3 |
| 3x6 | 7x6 |

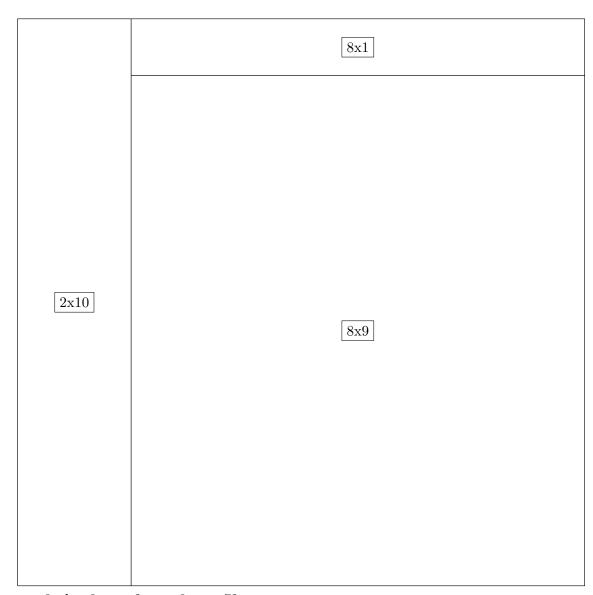
$$\begin{array}{l} w=7\ ,\, h=6\ ,\, x=3\ ,\, y=0\ ,\, v=42\\ w=3\ ,\, h=6\ ,\, x=0\ ,\, y=0\ ,\, v=18\\ w=9\ ,\, h=3\ ,\, x=1\ ,\, y=6\ ,\, v=27\\ w=1\ ,\, h=3\ ,\, x=0\ ,\, y=6\ ,\, v=3\\ w=7\ ,\, h=1\ ,\, x=3\ ,\, y=9\ ,\, v=7\\ \end{array}$$



$$w = 7$$
,  $h = 7$ ,  $x = 3$ ,  $y = 0$ ,  $v = 49$ 

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

$$\mathbf{w}$$
 =3 , h =9 , x =0 , y =0 , v =27



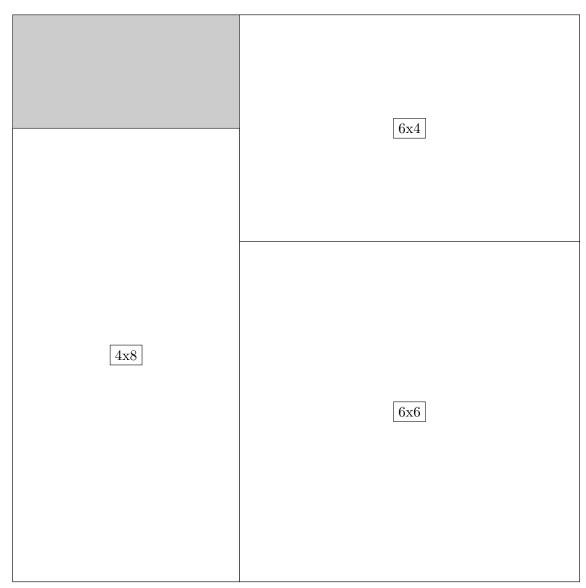
 $\begin{array}{l} w = 8 \ , \ h = 9 \ , \ x = 2 \ , \ y = 0 \ , \ v = 72 \\ w = 8 \ , \ h = 1 \ , \ x = 2 \ , \ y = 9 \ , \ v = 8 \\ w = 2 \ , \ h = 10 \ , \ x = 0 \ , \ y = 0 \ , \ v = 20 \end{array}$ 

| 2x1 | 7x1 |
|-----|-----|
|     |     |
|     |     |
|     |     |
|     |     |
| 3x9 | 7x9 |
|     |     |
|     |     |
|     |     |
|     |     |

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

$$w = 7$$
,  $h = 1$ ,  $x = 9$ ,  $y = 9$ ,  $v = 7$   
 $w = 3$ ,  $h = 9$ ,  $x = 0$ ,  $y = 0$ ,  $v = 27$ 

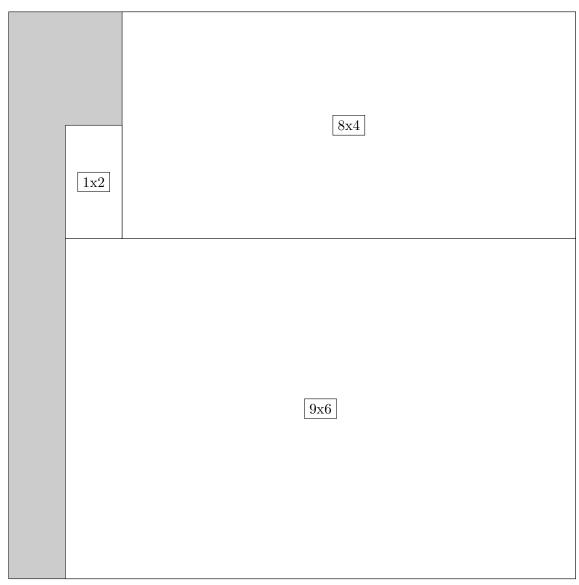
$$\mathbf{w}$$
 =2 , h =1 , x =1 , y =9 , v =2



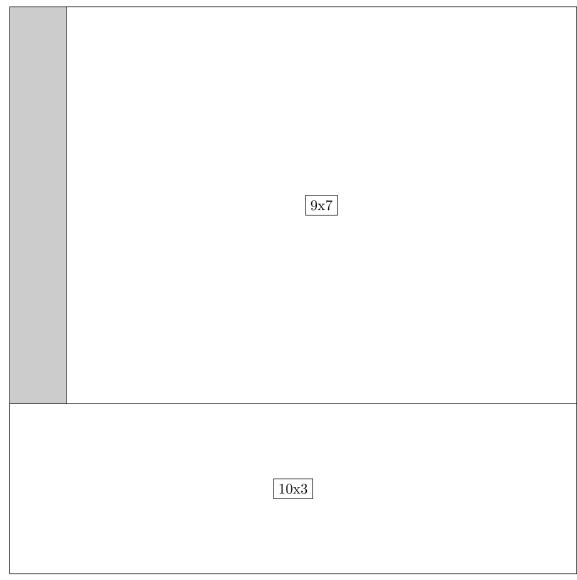
 $\begin{array}{l} w=6 \ , \ h=6 \ , \ x=4 \ , \ y=0 \ , \ v=36 \\ w=6 \ , \ h=4 \ , \ x=4 \ , \ y=6 \ , \ v=24 \\ w=4 \ , \ h=8 \ , \ x=0 \ , \ y=0 \ , \ v=32 \end{array}$ 

| 4x3 |     |
|-----|-----|
| 4x6 | 6x9 |

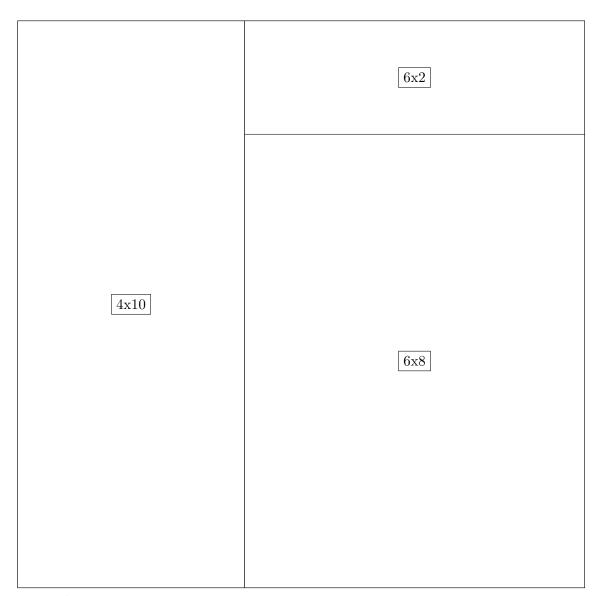
$$\begin{array}{l} w = 6 \ , \ h = 9 \ , \ x = 4 \ , \ y = 0 \ , \ v = 54 \\ w = 4 \ , \ h = 6 \ , \ x = 0 \ , \ y = 0 \ , \ v = 24 \\ w = 4 \ , \ h = 3 \ , \ x = 0 \ , \ y = 6 \ , \ v = 12 \end{array}$$



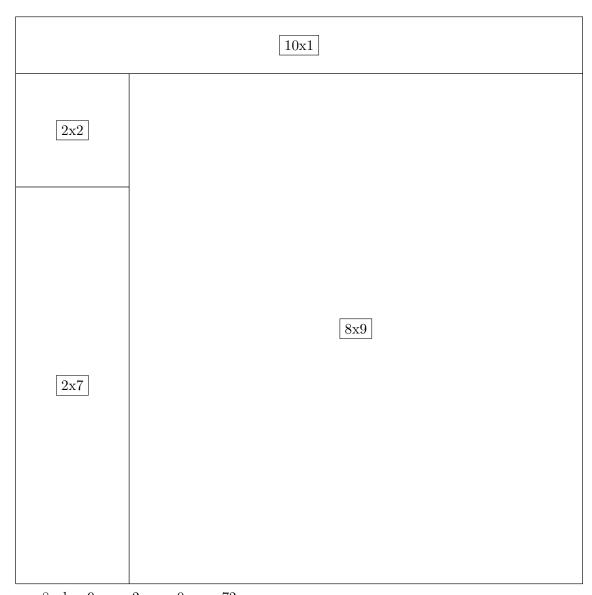
 $\begin{array}{l} w = 9 \ , \ h = 6 \ , \ x = 1 \ , \ y = 0 \ , \ v = 54 \\ w = 8 \ , \ h = 4 \ , \ x = 2 \ , \ y = 6 \ , \ v = 32 \\ w = 1 \ , \ h = 2 \ , \ x = 1 \ , \ y = 6 \ , \ v = 2 \end{array}$ 



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

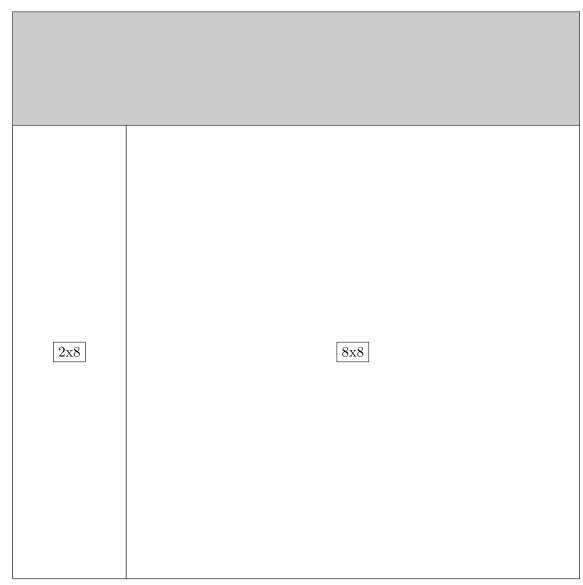


 $\begin{array}{l} w=6 \ , \ h=8 \ , \ x=4 \ , \ y=0 \ , \ v=48 \\ w=6 \ , \ h=2 \ , \ x=4 \ , \ y=8 \ , \ v=12 \\ w=4 \ , \ h=10 \ , \ x=0 \ , \ y=0 \ , \ v=40 \end{array}$ 



$$\begin{array}{l} w = 8 \; , \; h = 9 \; , \; x = 2 \; , \; y = 0 \; , \; v = 72 \\ w = 2 \; , \; h = 7 \; , \; x = 0 \; , \; y = 0 \; , \; v = 14 \\ w = 2 \; , \; h = 2 \; , \; x = 0 \; , \; y = 7 \; , \; v = 4 \end{array}$$

 $\mathbf{w}$  =10 , h =1 , x =0 , y =9 , v =10



| 1x5 | $9\mathrm{x}5$ |
|-----|----------------|
| 4x5 | $6\mathrm{x}5$ |

$$w = 6$$
,  $h = 5$ ,  $x = 4$ ,  $y = 0$ ,  $v = 30$ 

$$\le=4$$
 , h =5 , x =0 , y =0 , v =20

$$w$$
 =9 , h =5 , x =1 , y =5 , v =45

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

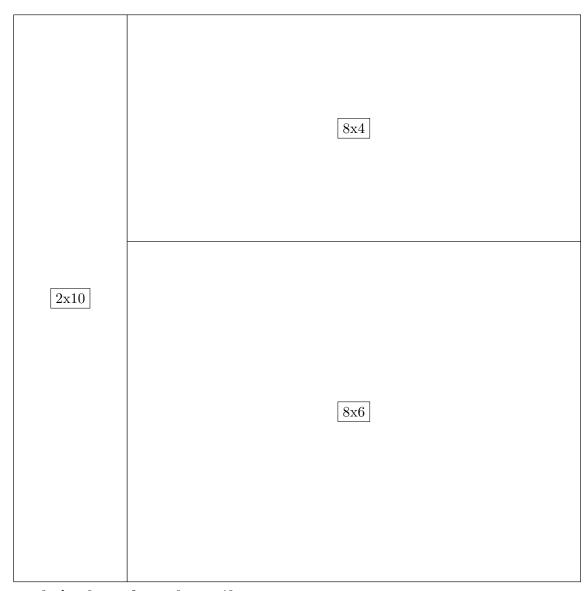
|   | 7x4 | 2x4 |
|---|-----|-----|
| 8 | x6  | 2x6 |

$$w = 2$$
,  $h = 6$ ,  $x = 8$ ,  $y = 0$ ,  $v = 12$ 

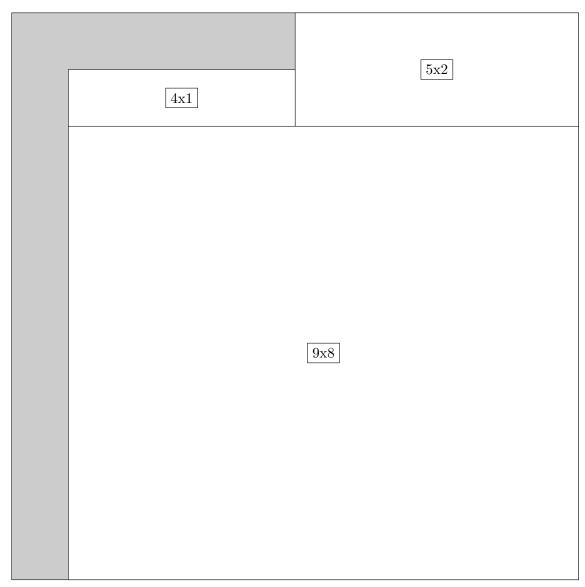
$$w = 8$$
,  $h = 6$ ,  $x = 0$ ,  $y = 0$ ,  $v = 48$ 

$$\mathbf{w}$$
 =7 , h =4 , x =1 , y =6 , v =28

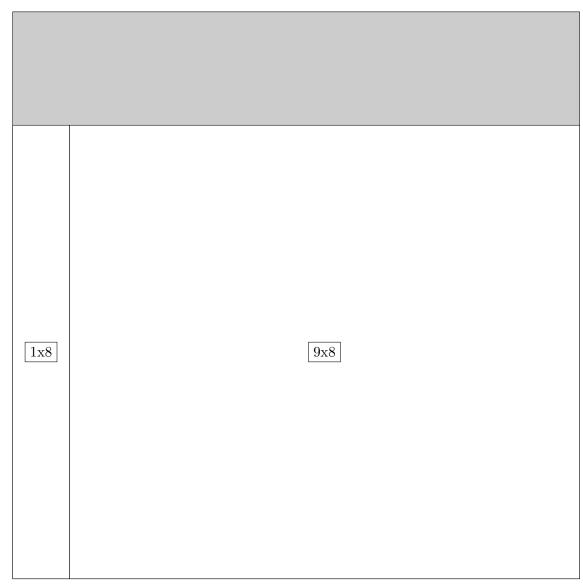
 $<sup>\</sup>mathbf{w}$  =2 , h =4 , x =8 , y =6 , v =8



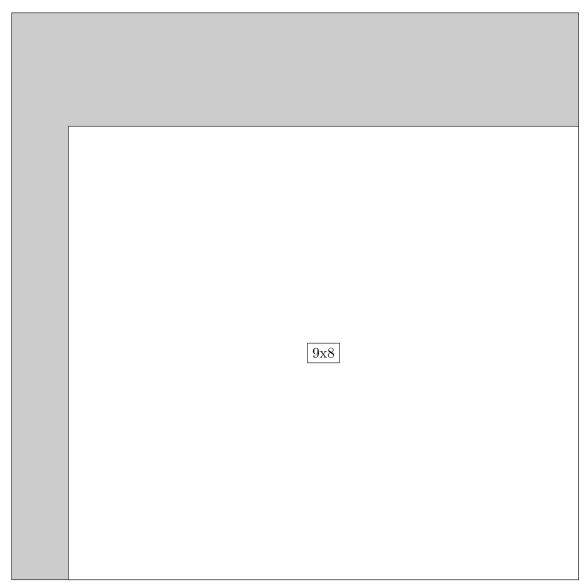
$$\begin{array}{l} w = 8 \ , \ h = 6 \ , \ x = 2 \ , \ y = 0 \ , \ v = 48 \\ w = 8 \ , \ h = 4 \ , \ x = 2 \ , \ y = 6 \ , \ v = 32 \\ w = 2 \ , \ h = 10 \ , \ x = 0 \ , \ y = 0 \ , \ v = 20 \end{array}$$



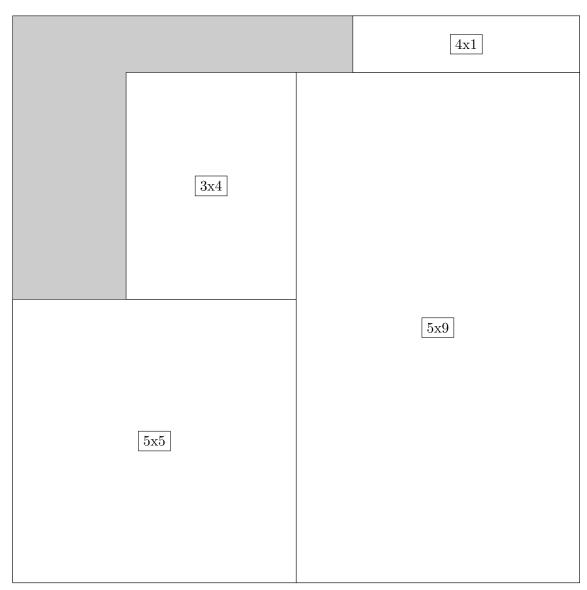
$$\begin{array}{l} w = 9 \ , \ h = 8 \ , \ x = 1 \ , \ y = 0 \ , \ v = 72 \\ w = 5 \ , \ h = 2 \ , \ x = 5 \ , \ y = 8 \ , \ v = 10 \\ w = 4 \ , \ h = 1 \ , \ x = 1 \ , \ y = 8 \ , \ v = 4 \end{array}$$



w =9, h =8, x =1, y =0, v =72 w =1, h =8, x =0, y =0, v =8



 $\mathbf{w}$  =9 , h =8 , x =1 , y =0 , v =72



 $\mathbf{w}$  =5 ,  $\mathbf{h}$  =9 ,  $\mathbf{x}$  =5 ,  $\mathbf{y}$  =0 ,  $\mathbf{v}$  =45

 $\mathbf{w}$  =4 , h =1 , x =6 , y =9 , v =4

 $\le =5$  , h =5 , x =0 , y =0 , v = 25

 $\mathbf{w}$  =3 , h =4 , x =2 , y =5 , v =12

| 5x5 | 5x5 |
|-----|-----|
| 4x5 | 6x5 |

$$\begin{array}{c} w = 6 \ , \, h = 5 \ , \, x = 4 \ , \, y = 0 \ , \, v = 30 \\ w = 4 \ , \, h = 5 \ , \, x = 0 \ , \, y = 0 \ , \, v = 20 \end{array}$$

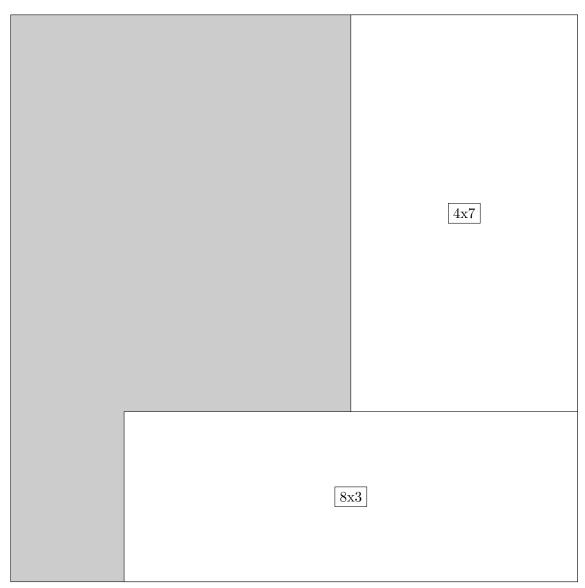
$$w$$
 =5 , h =5 , x =5 , y =5 , v =25

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

| 2x9 | 4x9 | 4x9 |
|-----|-----|-----|
|     |     |     |
|     |     |     |
|     |     |     |
|     |     |     |

 $\begin{array}{l} w = 4 \ , \ h = 9 \ , \ x = 6 \ , \ y = 0 \ , \ v = 36 \\ w = 4 \ , \ h = 9 \ , \ x = 2 \ , \ y = 0 \ , \ v = 36 \end{array}$ 

 $\mathbf{w}$  =2 , h =9 , x =0 , y =0 , v =18



$$\begin{array}{l} w = 8 \ , \ h = 3 \ , \ x = 2 \ , \ y = 0 \ , \ v = 24 \\ w = 4 \ , \ h = 7 \ , \ x = 6 \ , \ y = 3 \ , \ v = 28 \end{array}$$