${\bf ClassName:}~{\bf Class_01.2bp\text{-}40}$

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

TypeNum: <u>64</u>
Num: <u>100</u>
OutS: <u>2800</u>
InS: <u>2733</u>
Rate: <u>0.976</u>
UB: <u>28</u>
LB: <u>28</u>

LBWithCut: $\underline{28}$ NodeCount: $\underline{0}$ PrimalNode: $\underline{0}$ ColumnCount: $\underline{28}$ TotalCutCount: $\underline{0}$ RootCutCount: $\underline{0}$ LPSolverCnt: $\underline{1}$ PricingSolverCnt: $\underline{0}$ BranchAndBoundNum: $\underline{1}$

isOpt: **true**

TimeOnPrimal: $\underline{0.000 \text{ s}}$ TimeOnPricing: $\underline{0.000 \text{ s}}$ TimeOnRmp: $\underline{0.062 \text{ s}}$ TotalTime: $\underline{0.219 \text{ s}}$

1x2	9x2	
2x1	82	x2
2x7	4x6	4x6

$$\begin{array}{l} w = 4 \;,\; h = 6 \;,\; x = 6 \;,\; y = 0 \;,\; v = 24 \\ w = 4 \;,\; h = 6 \;,\; x = 2 \;,\; y = 0 \;,\; v = 24 \\ w = 8 \;,\; h = 2 \;,\; x = 2 \;,\; y = 6 \;,\; v = 16 \\ w = 2 \;,\; h = 7 \;,\; x = 0 \;,\; y = 0 \;,\; v = 14 \\ w = 2 \;,\; h = 1 \;,\; x = 0 \;,\; y = 7 \;,\; v = 2 \\ w = 9 \;,\; h = 2 \;,\; x = 1 \;,\; y = 8 \;,\; v = 18 \\ w = 1 \;,\; h = 2 \;,\; x = 0 \;,\; y = 8 \;,\; v = 2 \end{array}$$

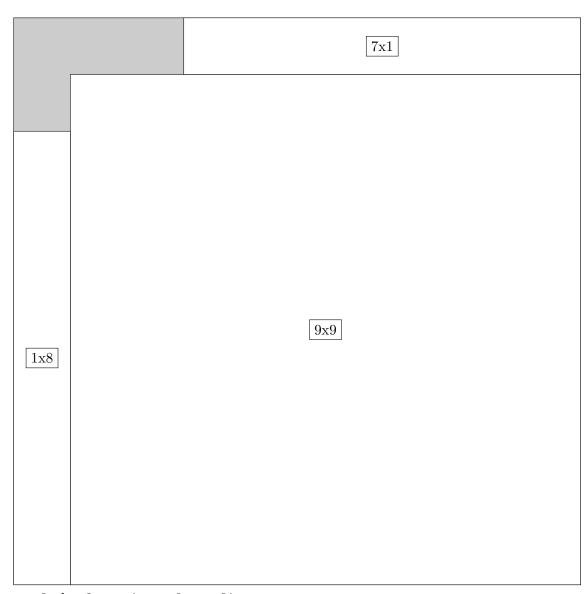
6x3	3x3
7x7	3x7

$$\mathbf{w}$$
 =3 , h =7 , x =7 , y =0 , v =
21

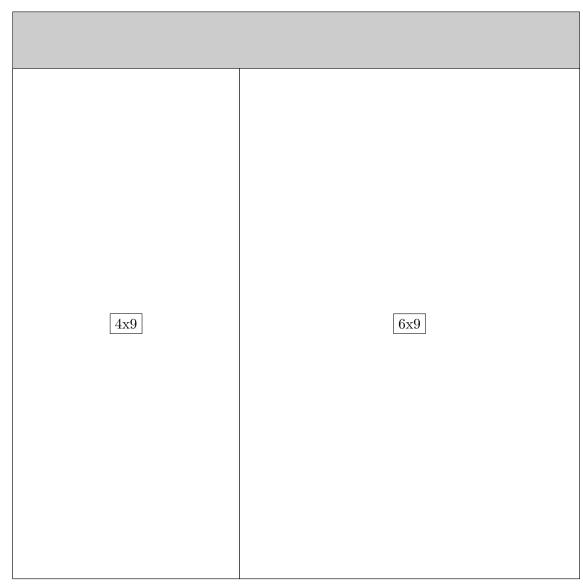
$$\mathbf{w}$$
 =7 , h =7 , x =0 , y =0 , v =49

$$\mathbf{w}$$
 =6 , h =3 , x =1 , y =7 , v =18

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



$$\begin{array}{l} w = 9 \ , \ h = 9 \ , \ x = 1 \ , \ y = 0 \ , \ v = 81 \\ w = 1 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 8 \\ w = 7 \ , \ h = 1 \ , \ x = 3 \ , \ y = 9 \ , \ v = 7 \end{array}$$



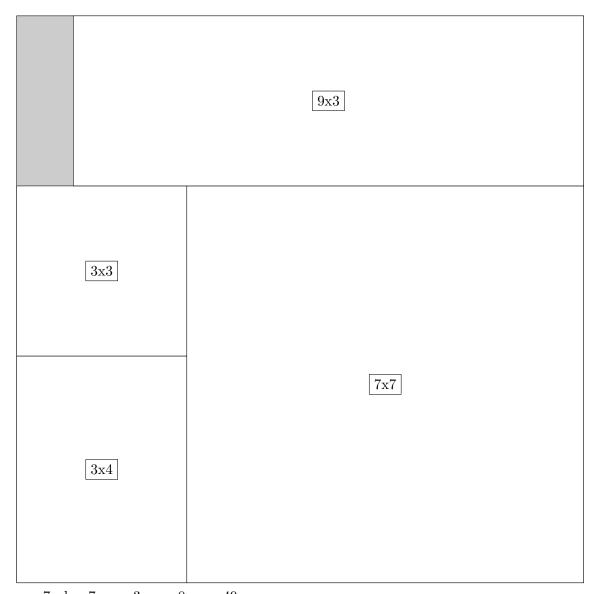
w =6, h =9, x =4, y =0, v =54 w =4, h =9, x =0, y =0, v =36

	2x3	[4x3]
2x7	83	x7

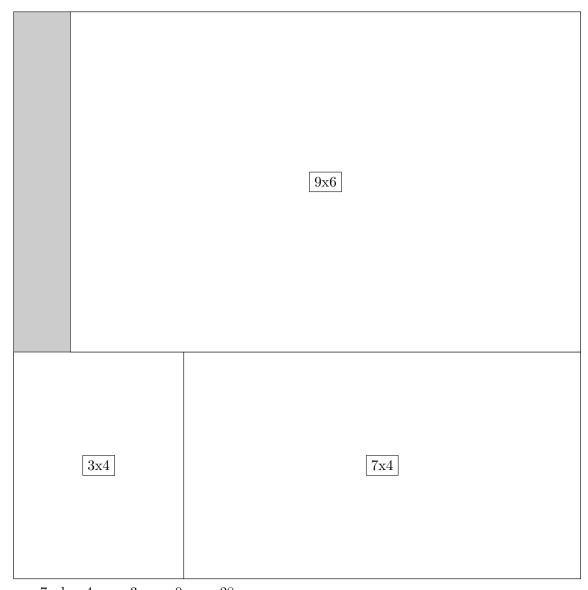
 $\begin{array}{c} w = 8 \ , \ h = 7 \ , \ x = 2 \ , \ y = 0 \ , \ v = 56 \\ w = 2 \ , \ h = 7 \ , \ x = 0 \ , \ y = 0 \ , \ v = 14 \\ \end{array}$

 \mathbf{w} =4 , h =3 , x =6 , y =7 , v =12

 \mathbf{w} =2 , h =3 , x =4 , y =7 , v =6



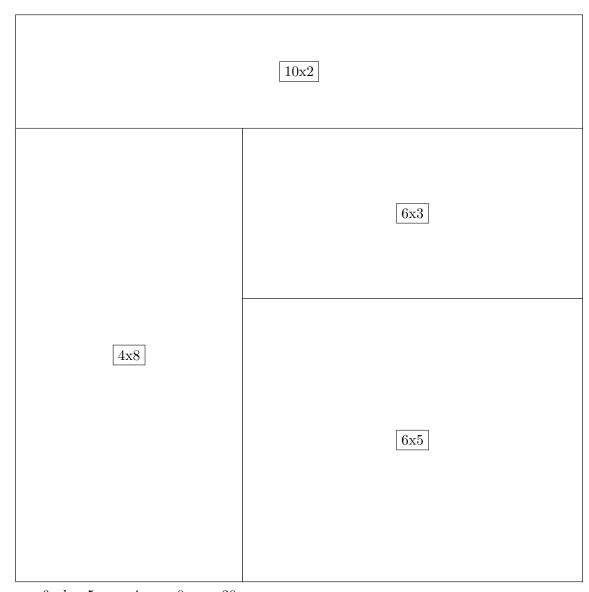
$$\begin{array}{l} w=7 \ , \ h=7 \ , \ x=3 \ , \ y=0 \ , \ v=49 \\ w=3 \ , \ h=4 \ , \ x=0 \ , \ y=0 \ , \ v=12 \\ w=3 \ , \ h=3 \ , \ x=0 \ , \ y=4 \ , \ v=9 \\ w=9 \ , \ h=3 \ , \ x=1 \ , \ y=7 \ , \ v=27 \end{array}$$



$$\begin{array}{l} w = 7 \ , \ h = \! 4 \ , \ x = \! 3 \ , \ y = \! 0 \ , \ v = \! 28 \\ w = \! 3 \ , \ h = \! 4 \ , \ x = \! 0 \ , \ y = \! 0 \ , \ v = \! 12 \\ w = \! 9 \ , \ h = \! 6 \ , \ x = \! 1 \ , \ y = \! 4 \ , \ v = \! 54 \end{array}$$

[3x2]	7x2	
	10x2	
	10x6	

$$\begin{array}{l} w = & 10 \ , \ h = & 6 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 60 \\ w = & 10 \ , \ h = & 2 \ , \ x = & 0 \ , \ y = & 6 \ , \ v = & 20 \\ w = & 7 \ , \ h = & 2 \ , \ x = & 3 \ , \ y = & 8 \ , \ v = & 14 \\ w = & 3 \ , \ h = & 2 \ , \ x = & 0 \ , \ y = & 8 \ , \ v = & 6 \end{array}$$



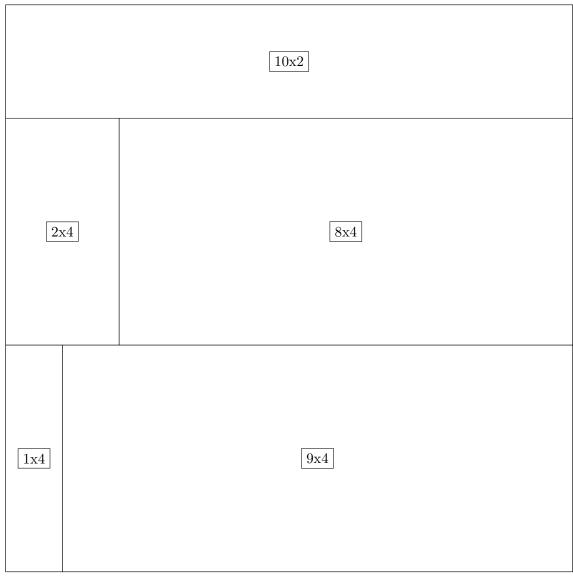
$$\begin{array}{l} w = 6 \ , \ h = 5 \ , \ x = 4 \ , \ y = 0 \ , \ v = 30 \\ w = 6 \ , \ h = 3 \ , \ x = 4 \ , \ y = 5 \ , \ v = 18 \\ w = 4 \ , \ h = 8 \ , \ x = 0 \ , \ y = 0 \ , \ v = 32 \\ w = 10 \ , \ h = 2 \ , \ x = 0 \ , \ y = 8 \ , \ v = 20 \end{array}$$



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

[4x2]		6x2
3x8		$7\mathrm{x}8$

$$\begin{array}{l} w=7\ ,\, h=8\ ,\, x=3\ ,\, y=0\ ,\, v=56\\ w=3\ ,\, h=8\ ,\, x=0\ ,\, y=0\ ,\, v=24\\ w=6\ ,\, h=2\ ,\, x=4\ ,\, y=8\ ,\, v=12\\ w=4\ ,\, h=2\ ,\, x=0\ ,\, y=8\ ,\, v=8 \end{array}$$



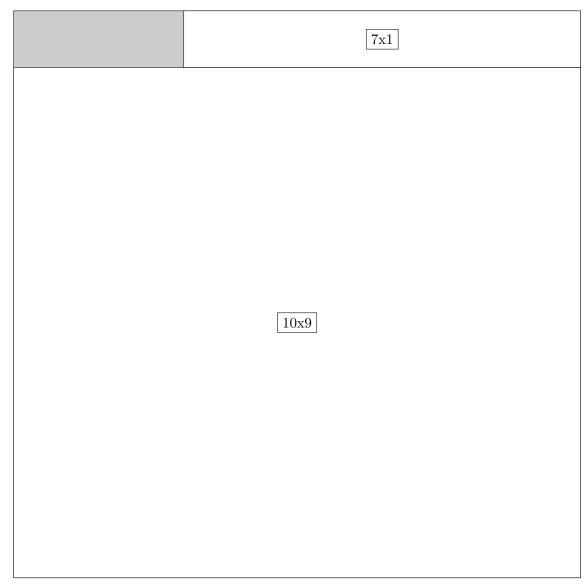
$$\begin{array}{l} w=9\ ,\ h=4\ ,\ x=1\ ,\ y=0\ ,\ v=36\\ w=1\ ,\ h=4\ ,\ x=0\ ,\ y=0\ ,\ v=4\\ w=8\ ,\ h=4\ ,\ x=2\ ,\ y=4\ ,\ v=32\\ w=2\ ,\ h=4\ ,\ x=0\ ,\ y=4\ ,\ v=8\\ w=10\ ,\ h=2\ ,\ x=0\ ,\ y=8\ ,\ v=20 \end{array}$$

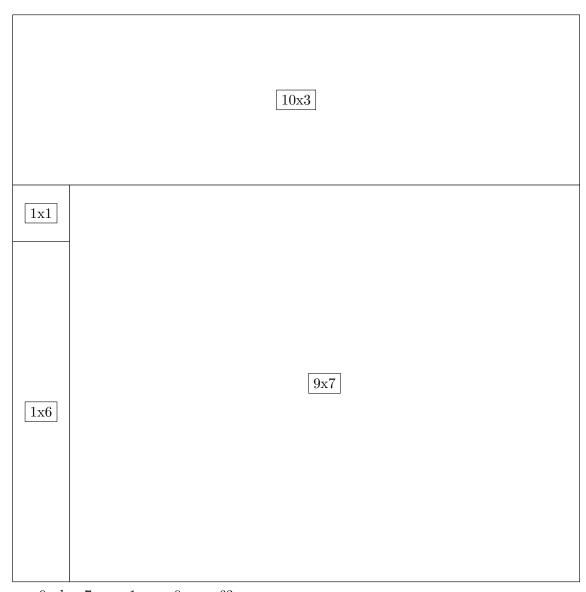
4x10	6x10

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

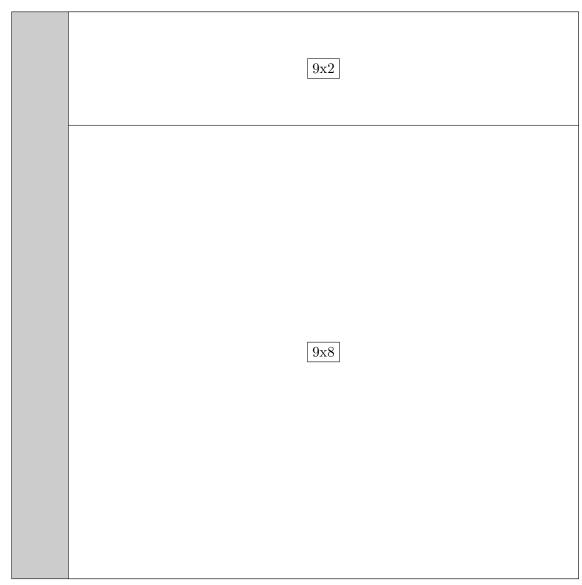


 \mathbf{w} =10 , h =10 , x =0 , y =0 , v =100





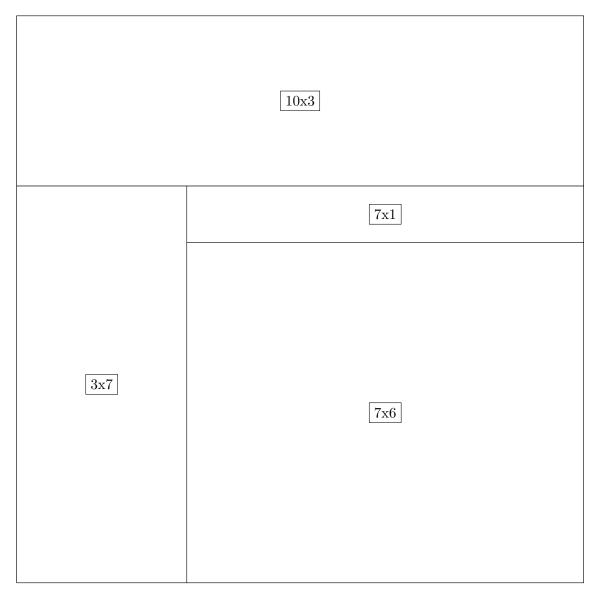
$$\begin{array}{l} w=9\ ,\, h=7\ ,\, x=1\ ,\, y=0\ ,\, v=63\\ w=1\ ,\, h=6\ ,\, x=0\ ,\, y=0\ ,\, v=6\\ w=1\ ,\, h=1\ ,\, x=0\ ,\, y=6\ ,\, v=1\\ w=10\ ,\, h=3\ ,\, x=0\ ,\, y=7\ ,\, v=30 \end{array}$$



$$\begin{array}{c} w = 9 \ , \ h = 8 \ , \ x = 1 \ , \ y = 0 \ , \ v = 72 \\ w = 9 \ , \ h = 2 \ , \ x = 1 \ , \ y = 8 \ , \ v = 18 \end{array}$$

[4x4]		6x4	
3x6		7x6	

$$\begin{array}{l} w=7\ ,\, h=6\ ,\, x=3\ ,\, y=0\ ,\, v=42\\ w=3\ ,\, h=6\ ,\, x=0\ ,\, y=0\ ,\, v=18\\ w=6\ ,\, h=4\ ,\, x=4\ ,\, y=6\ ,\, v=24\\ w=4\ ,\, h=4\ ,\, x=0\ ,\, y=6\ ,\, v=16 \end{array}$$



$$w = 7$$
, $h = 6$, $x = 3$, $y = 0$, $v = 42$

$$\mathbf{w}$$
 =7 , h =1 , x =3 , y =6 , v =7

$$\le =3$$
 , h =7 , x =0 , y =0 , v =
21

$$\mathbf{w}$$
 =10 , h =3 , x =0 , y =7 , v =30

3x5	$7\mathrm{x}5$
3x5	7x5

 $\begin{array}{l} w=7\ ,\, h=5\ ,\, x=3\ ,\, y=0\ ,\, v=35\\ w=3\ ,\, h=5\ ,\, x=0\ ,\, y=0\ ,\, v=15\\ w=7\ ,\, h=5\ ,\, x=3\ ,\, y=5\ ,\, v=35\\ w=3\ ,\, h=5\ ,\, x=0\ ,\, y=5\ ,\, v=15 \end{array}$

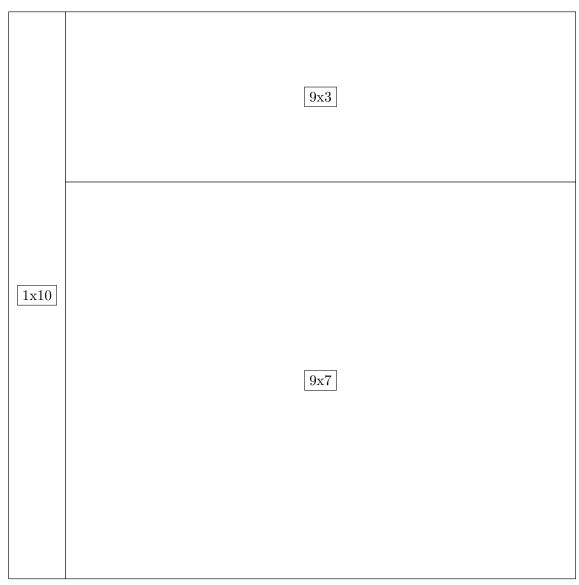
4x2	5x1
47.2	
5x1	
	5x9
5x7	

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

$$w = 5$$
, $h = 7$, $x = 0$, $y = 0$, $v = 35$

$$w = 5$$
, $h = 1$, $x = 0$, $y = 7$, $v = 5$

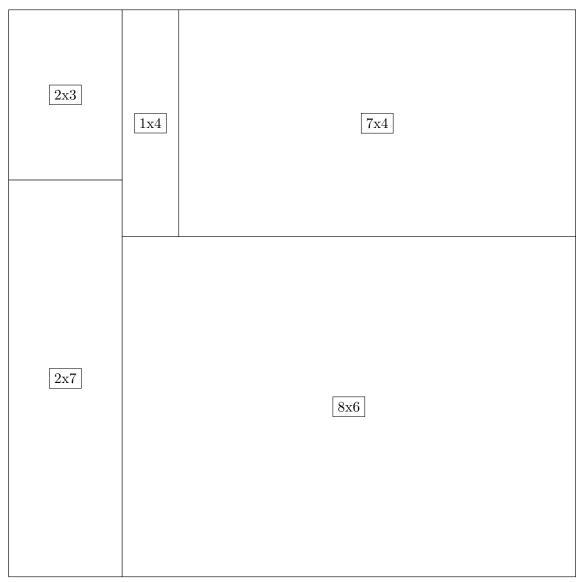
$$w = 4$$
, $h = 2$, $x = 1$, $y = 8$, $v = 8$



 $\begin{array}{l} w = 9 \ , \ h = 7 \ , \ x = 1 \ , \ y = 0 \ , \ v = 63 \\ w = 9 \ , \ h = 3 \ , \ x = 1 \ , \ y = 7 \ , \ v = 27 \\ w = 1 \ , \ h = 10 \ , \ x = 0 \ , \ y = 0 \ , \ v = 10 \end{array}$

10	x3
10	x3
5x4	$5\mathrm{x}4$

 $\begin{array}{l} w=5 \ , \ h=4 \ , \ x=5 \ , \ y=0 \ , \ v=20 \\ w=5 \ , \ h=4 \ , \ x=0 \ , \ y=0 \ , \ v=20 \\ w=10 \ , \ h=3 \ , \ x=0 \ , \ y=4 \ , \ v=30 \\ w=10 \ , \ h=3 \ , \ x=0 \ , \ y=7 \ , \ v=30 \end{array}$



 $\begin{array}{l} w=8 \;,\; h=6 \;,\; x=2 \;,\; y=0 \;,\; v=48 \\ w=7 \;,\; h=4 \;,\; x=3 \;,\; y=6 \;,\; v=28 \\ w=1 \;,\; h=4 \;,\; x=2 \;,\; y=6 \;,\; v=4 \\ w=2 \;,\; h=7 \;,\; x=0 \;,\; y=0 \;,\; v=14 \\ w=2 \;,\; h=3 \;,\; x=0 \;,\; y=7 \;,\; v=6 \end{array}$

2x2	3x1	4x1
2x8	3x9	[4x9]

w=4 , h=9 , x=6 , y=0 , v=36

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

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

w = 3, h = 1, x = 3, y = 9, v = 3

 $\le =2$, h =8 , x =1 , y =0 , v = 16

 \mathbf{w} =2 , h =2 , x =1 , y =8 , v =4

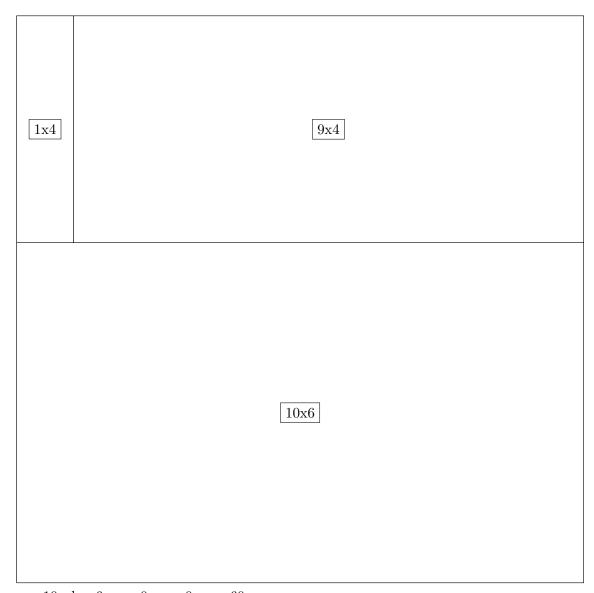
	2x10	2x10	4x10
[2x8]			

 $\begin{array}{c} w = 4 \ , \ h = 10 \ , \ x = 6 \ , \ y = 0 \ , \ v = 40 \\ w = 2 \ , \ h = 10 \ , \ x = 4 \ , \ y = 0 \ , \ v = 20 \end{array}$

 \mathbf{w} =2 , h =10 , x =2 , y =0 , v =20

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





$$\begin{array}{l} w = & 10 \ , \ h = & 6 \ , \ x = & 0 \ , \ y = & 0 \ , \ v = & 60 \\ w = & 9 \ , \ h = & 4 \ , \ x = & 1 \ , \ y = & 6 \ , \ v = & 36 \\ w = & 1 \ , \ h = & 4 \ , \ x = & 0 \ , \ y = & 6 \ , \ v = & 4 \end{array}$$