MATH 480 - Homework 7

 $\dim = 4$

1 3

 $\boxed{2} \quad \dim = 4$

 $\frac{1}{3} \quad \dim = 4$

 $\dim = 4$

 $\dim = 4$

 $\dim = 4$

2 3 4 5

1

 $\boxed{1}$ $\dim = 4$

2 3 4 5

 $\frac{1}{2} \qquad \dim = 4$

 $\boxed{1} \qquad \dim = 4$

2 3 4 5

3

 $\dim = 4$

2

4

1 3 5

2

 $\dim = 5$

 $\boxed{1 \ 2 \ 3} \quad \dim = 5$

4 5

 $\begin{array}{c|cc}
1 & 2 & 3 \\
\hline
4 & 5
\end{array}$ dim = 5

 $\begin{array}{c|cc} 1 & 2 & 3 \\ \hline & 4 & 5 \end{array} \quad \dim = 5$

 $\boxed{1} \qquad \boxed{2 \mid 3} \qquad \dim = 5$

 4
 5

 $\frac{1}{2} \qquad \dim = 5$

4

 $\frac{1}{2}$ dim = 5

5

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 5$

 3
 4

 5

 $\dim = 5$

1

2 3 4 5

 $\begin{array}{c|c}
\hline
1 \\
2 & 3
\end{array} \quad \dim = 5$

4 5

 $\dim = 6$

 3
 4
 5

 $\dim = 6$

1 2 3 4

5

 $\frac{1}{\dim = 6}$

3 4 5

 $\boxed{1} \qquad \boxed{2} \qquad \boxed{3} \qquad \dim = 6$

4

 $\boxed{1}$ dim = 6

 2
 3
 4

 5

 $\frac{1}{\dim = 6}$

2

3 4 5

 $\dim = 9$

 1
 2

 3
 4
 5

 $\dim = 9$

 $\begin{array}{|c|c|}
\hline
1\\
\hline
2\\
\hline
4\\
\hline
5
\end{array}$

2

 $\dim = 9$

3

1

 $\boxed{1 \mid 2 \mid 3} \qquad \dim = 9$

4 5

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 9$

3 4 5

 $\boxed{1 \quad 2} \qquad \boxed{3} \qquad \dim = 9$

4 5

 $\dim = 9$

 $\boxed{1} \qquad \qquad \dim = 9$

3

 $\dim = 9$

 1
 2

 3
 4

 5

 $\begin{array}{c|cccc}
 & 1 & 2 \\
\hline
 & 3 & 4 & 5 \\
\end{array}$ $\dim = 9$

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 9$

3 4 5

 $\dim = 9$

1 2

3 4 5

 $\boxed{1 \quad 2} \qquad \boxed{3} \qquad \dim = 9$

 $\dim = 9$ 3 4

 $\dim = 9$

> $\dim = 9$

 $\dim = 9$ 1 2

 $\dim = 9$

 $\dim = 10$

1

3

 $\boxed{1 \quad 2} \quad \dim = 10$

3 4

 $\frac{1}{2} \qquad \dim = 10$

3

1

5

 $\dim = 10$

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 10$

 3

 5

 $\boxed{1 \quad \text{dim} = 10}$

 $\dim = 10$

	1		2	
3		4		5

 $\dim=10$



 $\dim = 10$



 $\dim = 10$



2

 $\dim = 10$

 $\boxed{1} \quad \dim = 10$

2 3

4 5

 $\frac{1}{2} \qquad \dim = 10$

[3] [4]

 $\boxed{1 \quad 2} \qquad \boxed{3} \qquad \dim = 10$

5

 $\begin{array}{c|c}
1 & 2 \\
\hline
& 3 \\
\hline
4 & 5
\end{array}$ $\dim = 10$

 $\boxed{\frac{1}{3}} \quad \dim = 11$

4 5

 $\dim = 11$

1 2 3 4 5

 $\boxed{1}$ $\dim = 11$

 2
 3

 4
 5

 $\boxed{1} \qquad \boxed{2 \mid 3} \qquad \dim = 11$

4

5

 $\dim = 11$

 2
 3

 4
 5

1

 $\dim = 11$

 $\begin{bmatrix} 2 \\ 4 \end{bmatrix}$

 $\boxed{1} \qquad \boxed{2} \qquad \boxed{3} \qquad \dim = 11$

4

5

 $\frac{1}{2}$ 3 4 $\dim = 11$

5

 $1 \ 2$ $\dim = 11$

3 4

 $\begin{array}{c|c}
 & \dim = 11 \\
\hline
 & 1 \\
\hline
 & 3 \\
\hline
 & 4 & 5
\end{array}$

 $\dim = 11$

 $\begin{array}{c|c}
2 \\
\hline
5
\end{array}$

 $\dim = 11$

 2

 3
 4

 5

 $\begin{array}{|c|c|c|c|}
\hline
1 & & & \\
\hline
2 & 3 & & 4
\end{array}$ $\dim = 11$

5

 $\boxed{1 \quad 2} \qquad \qquad \dim = 11$

3

 $\dim=11$

1 2 3 4 5

 $\frac{1}{\dim = 11}$

2

3 4 5

 $\dim = 11$

4

3

 $\boxed{1} \qquad \boxed{2 \mid 3} \qquad \dim = 11$

4

5

1 2

 $\dim = 11$

 $\begin{array}{c|c}
1 \\
4
\end{array}$ $\begin{array}{c|c}
1 \\
5
\end{array}$

 $\boxed{1} \qquad \dim = 11$

3 4 5

 $\boxed{1} \qquad \boxed{2} \qquad \qquad \dim = 11$

3

4 5

 $\boxed{1 \ 2 \ 3} \quad \dim = 11$

5

 $\dim = 11$

1 2 3 4 5 $\boxed{1}$ $\dim = 11$

2 3 4

5

 $\boxed{1}$ $\dim = 11$

3 4 5

 $\dim=11$

 $\dim = 11$

1 2 3

4 5

2

 $\dim = 11$

1 2 3 4 5

 $\begin{array}{c|c} & \dim = 11 \\ \hline 2 & 3 \\ \hline & 5 \end{array}$

 $\dim = 11$

 2
 3

 5

 $\frac{1}{2} \qquad \dim = 11$

3 4 5

 $\boxed{1} \qquad \boxed{2 \mid 3} \qquad \dim = 11$

4

5

 $\boxed{1 \ 2 \ 3} \qquad \qquad \dim = 11$

$$\dim = 11$$

$$\begin{array}{c|c}
\hline
1 & & \dim = 11 \\
\hline
3 & 4 & 5 & \\
\end{array}$$

$$\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 & 4
\end{array}$$

$$\dim = 11$$

$$\begin{array}{c|c}
\hline
1 & \hline
2 & 3 \\
& 4 \\
\hline
5 & \\
\end{array}$$
 dim = 11

 $\boxed{1 \quad 2} \quad \dim = 11$

3 4

5

 $\begin{bmatrix} 2 \\ 5 \end{bmatrix}$ $\begin{bmatrix} 3 \end{bmatrix}$ $\begin{bmatrix} 4 \end{bmatrix}$

 $\boxed{1} \qquad \dim = 15$

 3
 4
 5

 $\boxed{1} \qquad \dim = 15$

 $\frac{1 \quad 2 \quad 3}{1 \quad 2 \quad 3} \quad \dim = 15$

 $\begin{array}{c|c}
\hline
1 & \dim = 15 \\
\hline
2 & 3 & 4 \\
\hline
5 & \\
\hline
 & 1 \\
\hline
2 & 3 & 4
\end{array}$ $\dim = 15$

5

 $\dim = 15$

 1
 2
 3

 4
 5

 $\boxed{1 \quad 2 \quad 3} \qquad \qquad \dim = 15$

5

 $\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
4
\end{array}$ dim = 15

 $\boxed{1 \quad 2} \qquad \boxed{3} \qquad \dim = 15$

5

 $\frac{1}{2} \qquad \dim = 15$

3 4 5

 $\begin{array}{c|c}
\hline
1 \\
\hline
2
\end{array}$ $\dim = 15$

3 4 5

 $\boxed{1} \qquad \dim = 15$

3 4 5

$$\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
3 & 4 \\
\hline
5 \\
\hline
\end{array}$$
dim = 15

$$\begin{array}{|c|c|}
\hline
1 \\
\hline
2 \\
\hline
3 & 4
\end{array}$$

$$\begin{array}{|c|c|}
\hline
5 \\
\hline$$

$$\begin{array}{c|c}
1 & 2 \\
\hline
 & 3 \\
\hline
 & 4
\end{array}$$
dim = 15

$$\begin{array}{c|c}
\hline
2 & 3 \\
\hline
4 \\
\hline
5
\end{array}$$

3 4 5

 $\begin{array}{c|c}
\hline
1 & \hline
2 & \\
3 & \\
\hline
4 & \\
\hline
5 & \\
\end{array}$

 $\boxed{1} \qquad \boxed{2 \mid 3} \qquad \dim = 15$

4

5

 $\begin{array}{c|c}
\hline
2\\
\hline
3
\end{array}$ $\dim = 15$

 $\boxed{1}$ dim = 15

5

 $\boxed{\frac{1}{3}} \qquad \boxed{2} \qquad \dim = 15$

4

5

 $\boxed{1 \qquad \text{dim} = 15}$

3 4 5

 $\begin{array}{c|c}
\hline
1 & \dim = 15 \\
\hline
2 & 3 \\
\hline
4 & \\
\hline
5 & \\
\end{array}$

 $\boxed{1} \quad \dim = 15$

5

 $1 \quad \dim = 15$

 $\boxed{1} \quad \dim = 15$

 3
 4

 5

 $\boxed{\frac{1}{2}} \quad \dim = 15$

 3

 4

 5

 $\boxed{1}$ dim = 15

3 4 5

 $\boxed{1}$ dim = 15

 $\begin{bmatrix} 2 & 3 \end{bmatrix}$

5

 $\frac{1}{2} \qquad \qquad \dim = 15$

3

2 3

1 $\dim = 15$

2 5

> 1 $\dim = 15$

3 4 5

> 1 $\dim=15$

3

5

 $\dim = 15$ 1 2

3

3 4

 $\dim = 15$ 2

 $\dim=15$ 2 $\dim = 15$ 3 4 5 $\dim = 15$ 1 2 $\dim=15$ 3 5 $\dim = 15$ 2

 $\boxed{1}$ dim = 15

 $\begin{array}{|c|c|c|c|}
\hline
2 & 3 & 4 \\
\hline
5 & 5 \\
\hline
\end{array}$

 $\frac{1}{\dim = 15}$

 $\begin{array}{c|c} & 2 \\ \hline 3 & 4 & 5 \\ \hline \end{array}$

 $\begin{array}{c|c}
\hline
2 \\
\hline
3 \\
\hline
\end{array}$

 $\boxed{1}$ dim = 15

3 4 5

 $\frac{1}{2} \quad \dim = 15$

 $\begin{array}{c|c}
\text{dim} = 15 \\
\hline
2 & 3 \\
\hline
4 & \\
\end{array}$

 $\boxed{1} \quad \dim = 15$

 $\boxed{3}$ $\boxed{4}$ $\boxed{5}$

 $\boxed{2} \qquad \boxed{1} \qquad \dim = 16$

 $1 \quad \dim = 16$

 2
 3

 4
 5

 $\boxed{1 \mid 2} \quad \dim = 16$

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 16$

 3

 5

 $\boxed{1 \quad 2} \qquad \qquad \dim = 16$

 3
 4

 5

 $\boxed{1} \qquad \boxed{2} \qquad \qquad \dim = 16$

3 4

5

 $\boxed{1 \qquad \boxed{2 \\ 3 \qquad }}$ $\dim = 16$

4 5

 $\begin{array}{|c|c|c|}
\hline
1 & 2 \\
\hline
 & 3 \\
\hline
\end{array}$ $\dim = 16$

 $\boxed{1} \quad \boxed{2}$

 3
 4

 5

 $\frac{1}{2}$ dim = 16

3

4 5

 $\boxed{1 \quad 2} \qquad \qquad \dim = 16$

3 5

 $\dim = 16$

 1
 2

 3

 4
 5

1 dim = 16

4 2 3 5

 $\begin{array}{c|c}
\hline
1 & \hline
2 \\
\hline
3 & 4
\end{array}$ $\dim = 16$

5

 $\begin{array}{c|c}
\hline
3 & 4 \\
\hline
\end{array}$ $\begin{array}{c|c}
\hline
2 & \dim = 16 \\
\end{array}$

5

 $\dim=16$

 1

 2
 3

 4
 5

 $\boxed{1 \quad 2} \qquad \qquad \dim = 16$

 3
 4

 5

 $\frac{1}{2} \qquad \dim = 16$

4

5

 $\boxed{1}$ $\dim = 16$

2 3

4 5

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 16$

5

 $\begin{array}{|c|c|c|} \hline 1 & \hline 2 \\ \hline & 3 & 4 \\ \hline \end{array} \quad \dim = 16$

5

 $\dim = 16$

2 3

4 5

 $\dim = 16$

 2
 3

 4
 5

 $\boxed{1}$ $\dim = 16$

 2
 3

 4
 5

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 16$

3 4 5

 $\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 &
\end{array}$ $\dim = 16$

4 5

 2

 4

 5

 $\dim=16$

1 2 3

 $\boxed{1} \qquad \boxed{2}$

 3
 4

 5

 $\dim = 16$

1 2 3 4 5

 $\boxed{\frac{1}{3}} \qquad \dim = 16$

4 5

 $\dim = 16$

 $\begin{bmatrix} 1 \\ 2 \end{bmatrix}$

4 5

 $\dim = 16$

 $\boxed{2}$

 $\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 & 4 \\
\hline
5 \\
\hline
\end{array}$ $\dim = 16$ $\begin{bmatrix}
1 \\
3
\end{bmatrix}$ $4 \\
\hline
5
\end{bmatrix}$

 $\dim=16$

 1
 2

 3
 4

 $\begin{array}{c|c}
\hline
1 \\
\hline
3 & 4
\end{array}$ $\begin{array}{c|c}
\hline
5
\end{array}$

 $\dim = 16$

 3

 4

 5

 $\begin{array}{c|c}
\hline
1 & 2 & 3
\end{array}$ $\dim = 20$

5

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 20$

3 4 5

 $\boxed{1}$ $\boxed{2}$ $\boxed{3}$ $\dim = 20$

4 5

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 20$

3 4

5

 $\dim = 20$

2 3

 $\boxed{1 \mid 2} \quad \dim = 20$

3 4 5

 $\dim = 20$

3 4

 $\dim = 20$

3 3 4

 $\boxed{1} \quad \dim = 20$

1 dim = 20

 2

 3

 4

5

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 20$

3

 $\begin{array}{c}
\text{dim} = 20 \\
\hline
2 \\
3
\end{array}$

 $\begin{array}{c|c}
1 & 2 \\
\hline
3 & 4
\end{array}$

 $\dim = 20$ 2 3 4 5

 $\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
3 \\
\hline
4 \\
\hline
5
\end{array}$

 $\boxed{1 \quad 2} \qquad \qquad \dim = 20$

 3

 4

 5

 $\begin{array}{c|c}
\hline
1 & \hline
2 & \\
\hline
3 & \\
4 & \\
\hline
5 & \\
\end{array}$

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 20$

3 4 5

 $\begin{array}{c|c}
\hline
1 \\
\hline
3 \\
\hline
4
\end{array}$ $\dim = 20$

5

 $\boxed{1} \qquad \boxed{2}$

3 4 5

 $\boxed{\begin{array}{c|c} 1 \\ \hline 2 \\ \hline \end{array}} \quad \dim = 20$

 $\boxed{\frac{1}{3}} \qquad \boxed{2}$ $\dim = 20$

 4
 5

 $\dim = 20$

4 5

 $\dim = 20$

1 2 3 4 5

 $\dim = 20$

5

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 20$

 3

 4

 5

$$\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
4
\end{array}$$

$$\begin{array}{c|c}
\hline
3 \\
\hline
5
\end{array}$$

$$\begin{array}{c|c}
1 & & \\
& 2 \\
\hline
3 & & \\
\hline
5 & & \\
\end{array}$$

$$\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
3
\end{array}$$

$$\begin{array}{c}
\hline
5
\end{array}$$

$$\begin{array}{c|c}
\hline
2 & \hline
3 & \\
\hline
4 & 5
\end{array}$$

$$\dim = 20$$

$$\dim = 20$$

 $\frac{1}{2} \quad \dim = 20$

3

4 5

 $\boxed{1 \\ \boxed{2} \quad \boxed{3} \quad \boxed{4}} \quad \dim = 20$

5

 $\boxed{2} \qquad \boxed{\frac{1}{3}} \quad \dim = 20$

5

 $\frac{1}{2} \qquad \dim = 20$

3 4 5

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 20$

3

 $\dim = 20$ $\dim = 20$ $\dim = 20$ 3 4 5 $\dim = 20$

 $\dim = 20$

 $\dim = 20$ $\boxed{2}$ $\boxed{3} \boxed{4}$

 $\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
3 \\
\hline
\end{array}$

 $\begin{array}{c|c}
1 & 2 \\
\hline
3 & 4
\end{array}$

 $\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 \\
\hline
4 & 5 \\
\end{array}$ $\dim = 20$

 $\dim = 20$ $\boxed{1}$ $\boxed{2}$ $\boxed{3}$ $\boxed{4}$

 $\boxed{1 \quad 2} \qquad \boxed{3} \qquad \dim = 20$

5

 $\begin{array}{c|c}
\hline
1 & \hline
3 & 4
\end{array}$ $\begin{array}{c|c}
\hline
2 & \dim = 20$

5

 $\boxed{1} \qquad \qquad \dim = 20$

 $\dim = 20$

1 2 3

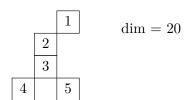
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5

 $\frac{1}{2} \quad \text{dim} = 20$

$$\dim = 20$$





$$\begin{array}{c|c}
\hline
1 & & \dim = 20 \\
\hline
3 & 4 & & \\
\hline
& 5 & & \\
\end{array}$$

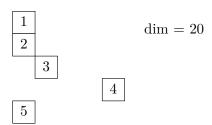
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$$\dim = 20$$



$$\boxed{1 \quad 2} \quad \dim = 20$$

$$\dim = 20$$



$$\boxed{\frac{1}{2}} \quad \dim = 20$$

$$\begin{array}{c|c}
\hline
1 & \dim = 20 \\
\hline
2 & \overline{3} \\
\hline
4 & \end{array}$$

$$\begin{array}{c|c}
\hline
1 \\
\hline
2 & 3
\end{array}$$

$$\dim = 20$$

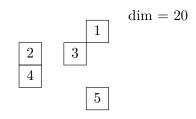
$$\boxed{1}$$

$$\boxed{2 \mid 3}$$

$$\dim = 20$$

$$\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
\hline
3 & 4
\end{array}$$

$$\begin{array}{c|c}
\hline
5 \\
\hline
\end{array}$$



$$\dim = 20$$

$$\boxed{2}$$

$$\boxed{4}$$

$$\boxed{5}$$

$$\begin{array}{c|c}
\hline
1 & \dim = 20 \\
\hline
2 & 3 \\
\hline
4 & 5
\end{array}$$

 $\dim = 20$ $\boxed{3} \qquad \boxed{4}$ $\boxed{5}$

 $\boxed{1} \quad \dim = 20$

4 5

 $\boxed{1} \quad \dim = 20$

3 4 5

 $\boxed{1} \qquad \boxed{2} \qquad \dim = 20$

3

4 5

 $\begin{array}{c|c}
\hline
1 & & \\
& 2 \\
\hline
3 & & \\
\end{array}$

 $\begin{array}{c|c}
 & \dim = 20 \\
\hline
 & 1 & 2 \\
\hline
 & 4 \\
\hline
 & 5 \\
\end{array}$

 $\dim = 20$

 1
 2

 3
 4

 5

 $\boxed{1 \quad \boxed{2}} \qquad \dim = 20$

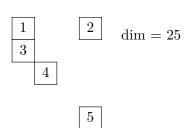
4 5

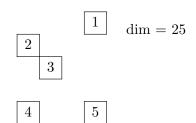
 $\boxed{1}$ $\dim = 20$

 2
 3

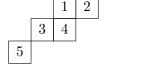
 4
 5

 $\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 & \\
\end{array}$





$$\dim = 25$$



$$\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 \\
\hline
4
\\
\hline
5
\\
\end{array}$$

$$\boxed{1 \quad 2} \quad \dim = 25$$

$$\begin{array}{|c|c|} \hline 1 \\ \hline 2 & 3 \\ \hline \end{array} \quad \dim = 25$$

$$\boxed{1 \\ 2 \\ } \quad \dim = 25$$

 3

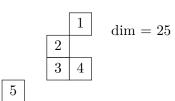
 5

$$\begin{array}{c|c}
 & \dim = 25 \\
\hline
2 & & \\
\hline
3 & 4 & \\
\end{array}$$

$$\begin{array}{c|c}
1 & 2 \\
\hline
3 & \\
\hline
4
\end{array}$$

$$\begin{array}{c|c}
\hline
1 & \dim = 25 \\
\hline
2 & 3 \\
\hline
4 & 5
\end{array}$$

$$\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 & \dim = 25 \\
\hline
4 & 5 & \\
\end{array}$$



$$\begin{array}{c|c}
\hline
1 & \dim = 25 \\
\hline
2 & 3 & \\
\hline
& 4 & \\
\hline
& 5 & \\
\end{array}$$

$$\begin{array}{c|c}
\text{dim} = 25 \\
\hline
1 & 2 \\
\hline
3 & 4
\end{array}$$

$$\begin{array}{c|c} & \dim = 25 \\ \hline 1 \\ \hline 3 \\ \hline 5 \\ \end{array}$$

$$\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
3 & 4
\end{array}$$

$$\begin{array}{c|c}
\hline
5 \\
\end{array}$$

$$\begin{array}{c|c} 1 & 2 \\ \hline 3 & 4 \\ \hline \end{array}$$

$$\begin{array}{c|c}
\hline
1 & & \\
\hline
2 & \\
\hline
3 & 4
\end{array}$$

$$\begin{array}{c|c}
\hline
2\\
3
\end{array}
\quad \text{dim} = 25$$

 $\begin{array}{c|c}
\hline
1 & \boxed{2} & \dim = 25 \\
\hline
3 & \boxed{4} \\
\hline
5 & \boxed{5}
\end{array}$

 $\dim = 25$

2

3

 $\begin{array}{c|c}
\hline
1 & \hline
2 & \dim = 25 \\
\hline
3 & \hline
\end{array}$

5

5

 $\boxed{\frac{1}{2 \mid 3}}$ dim = 25

 $\boxed{1}$ $\dim = 25$

 2

 4

 3

 5

 $\boxed{1} \quad \dim = 25$

4 5

 $\boxed{1} \qquad \boxed{2} \qquad \qquad \dim = 25$

3 4 5

 $\boxed{\begin{array}{c|c} \hline 1 \\ \hline 2 & 3 \end{array}} \qquad \dim = 25$

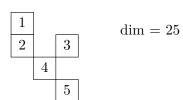
4 5

 $\dim = 25$

 1
 2

 3
 4

 5



$$\dim = 25$$

$$\dim = 25$$

$$\boxed{1 \quad 2}$$

$$\boxed{3}$$

$$\boxed{4}$$

$$\begin{array}{c|c} & \dim=25 \\ \hline 1 & 2 \\ \hline & 3 & 4 \\ \hline \end{array}$$

$$\boxed{2} \quad \boxed{1 \atop 3} \quad \dim = 25$$

 $\dim = 25$

2

 $\frac{3}{4}$

1 2

 $\dim=25$

3 4

5

1

 $\begin{bmatrix} 1 \\ 3 \end{bmatrix}$

 $\dim = 25$

4

5

 $\dim = 25$

2

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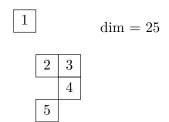
1

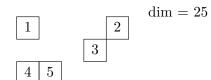
 $\dim = 25$

$$\begin{array}{c|c}
\hline
1 \\
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3 \\
\hline
4 \\
\hline
\end{array}$$

$$\begin{array}{c|c}
\hline
2 \\
\hline
4 \\
\hline
\end{array}$$

$$\begin{array}{c|c}
\hline
5 \\
\hline$$





$$\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 \\
\hline
4 \\
\hline
5
\end{array}$$

$$\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 & 4
\end{array}$$

 $\begin{array}{c|c} \dim = 25 \\ \hline 1 \\ \hline 2 & 3 \\ \hline 4 & 5 \\ \hline \end{array}$

 $\begin{array}{c|c}
\hline
1 \\
\hline
2
\end{array}$ $\dim = 25$

4 5

 $\begin{array}{c|c}
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1 \\
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\end{array}$ $\dim = 25$

4 5

 $\begin{array}{c|c}
\hline
1 & 2 \\
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3 &
\end{array}$ dim = 25

4 5

 $\boxed{1} \qquad \boxed{2} \qquad \qquad \dim = 25$

 3

 4
 5

 $\boxed{1} \qquad \boxed{2}$

 3

 4

 5

 $\boxed{1 \\ 2} \quad \dim = 25$

 $\begin{bmatrix} 3 \\ 5 \end{bmatrix}$

 $\begin{array}{c|c}
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2 & \hline
3 & \\
\hline
\end{array}$ $\dim = 25$

5

 $\boxed{1 \quad 2} \qquad \dim = 25$

4 5

 $\begin{array}{|c|c|c|}
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1 & & & \\
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2 & & & \\
\end{array}$

3

 $\begin{array}{|c|c|}
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1 \\
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\end{array}$ $\begin{array}{|c|c|}
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3 \\
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\end{array}$

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 $\begin{array}{c|c} \dim = 25 \\ \hline 1 & 2 \\ \hline \end{array}$

4 5

 $\boxed{1}$ dim = 25

 2
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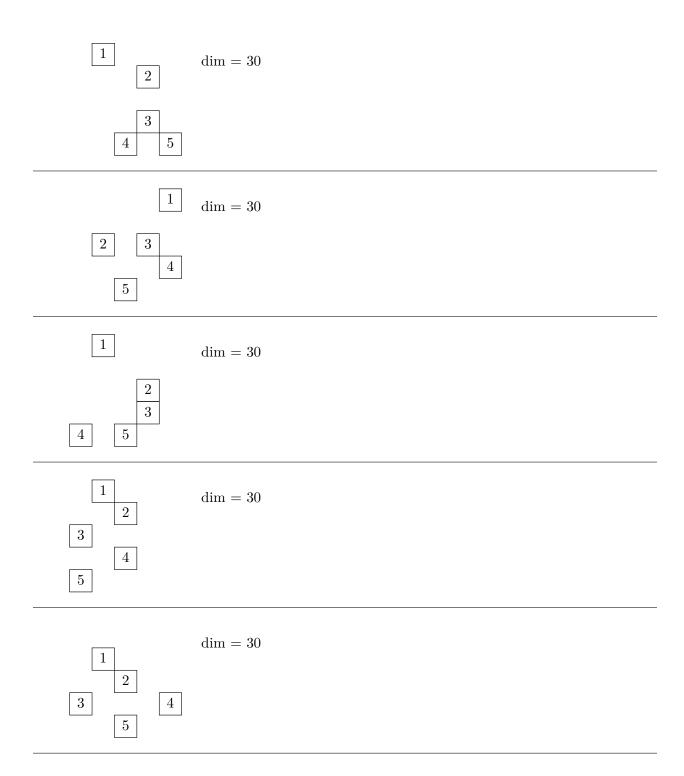
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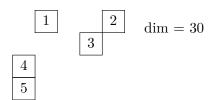
 $\begin{array}{c|c}
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1 & 2 \\
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4 & 5
\end{array}$ dim = 25

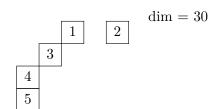
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\end{array}$ $\dim = 25$

3 4 5

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\hline
 & 3 & 4 & \\
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 & 4 & \\
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 & 5 & \\
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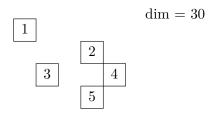


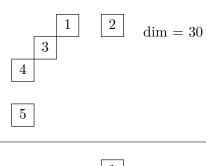


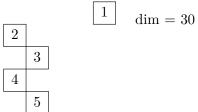


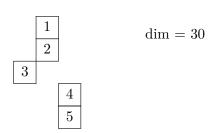
$$\begin{array}{|c|c|}
\hline
1 \\
\hline
2 \\
\hline
 & 3 \\
\hline
 & 4 & 5 \\
\hline
\end{array}$$

$$\begin{array}{c|c}
\hline
1 & 2 & \dim = 30 \\
\hline
& 3 \\
\hline
& 4 \\
\hline
& 5 & \\
\end{array}$$



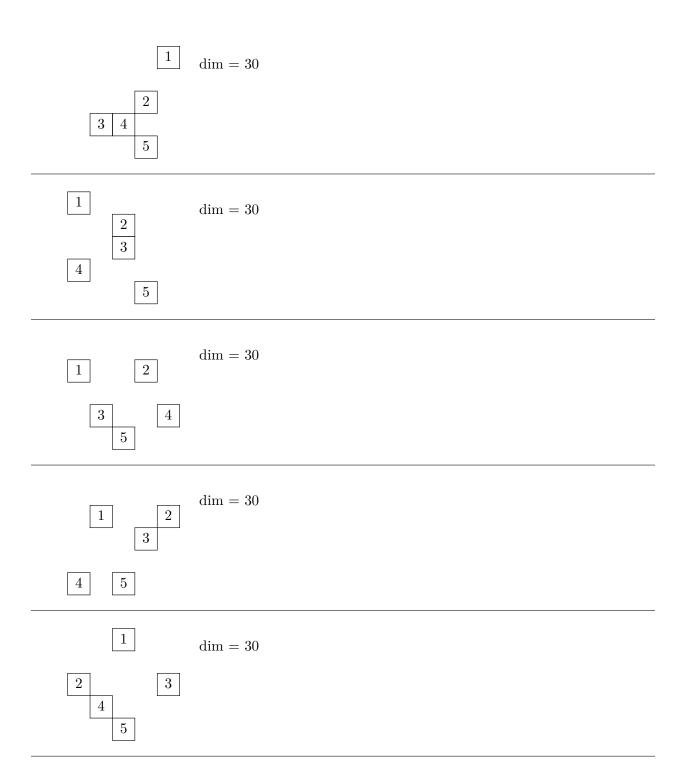






$$\begin{array}{c|c}
\hline
1 & & \dim = 30 \\
\hline
2 & & & \\
\hline
3 & & & \\
\hline
4 & & 5
\end{array}$$

$$\begin{array}{c|c}
1 & \dim = 30 \\
\hline
3 & 4 \\
\hline
5 & \\
\end{array}$$



 $\begin{array}{c|c}
\hline
1 & \dim = 30 \\
\hline
2 & 3 \\
\hline
4 & 5 &
\end{array}$

 $\begin{array}{c|c}
\hline
1 \\
\hline
2 & 3
\end{array}$ $\hline
4 \\
\hline
5 \\
\hline$

 $\begin{array}{c|c}
\hline
1 \\
\hline
2
\end{array}$ $\begin{array}{c|c}
\hline
3 & 4
\end{array}$

 $\begin{array}{c|c}
\text{dim} = 30 \\
\hline
1 & 2 \\
\hline
3
\end{array}$

 $\begin{array}{c|c}
1\\
\hline
2
\end{array} \qquad \dim = 30$ $\boxed{3}$ $\boxed{4}$ $\boxed{5}$

$$\begin{array}{c|c} & \dim = 30 \\ \hline 3 & 4 & \\ \hline \end{array}$$

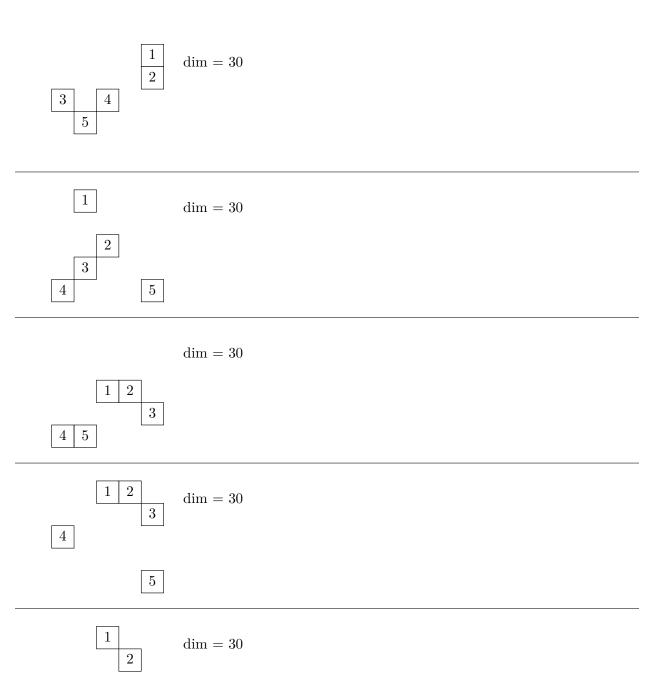


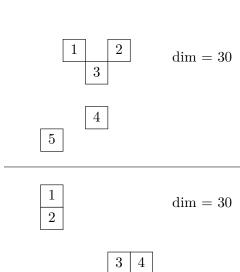
$$\begin{array}{c|c}
\hline
1\\
\hline
2
\end{array}$$

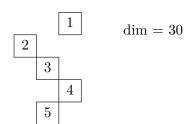
$$\dim = 30$$

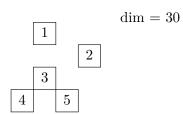
$$\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
4
\\
\hline
5
\\
\end{array}$$

$$\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 & \\
\hline
4 & 5
\end{array}$$









$$\dim = 30$$

$$\boxed{1}$$

$$\boxed{3}$$

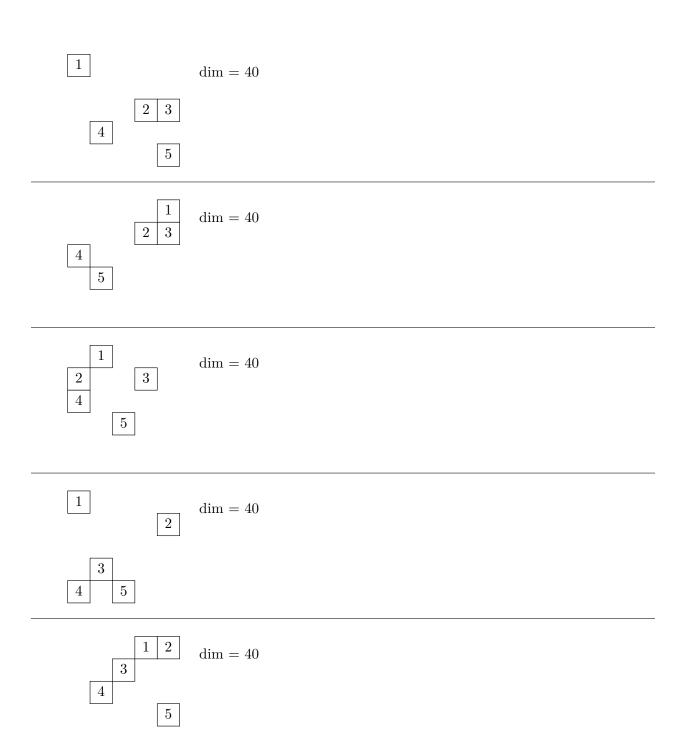
$$\boxed{4}$$

$$\boxed{5}$$

 $\dim = 30$

 $\dim = 30$ $\dim = 30$ 1 2 $\dim = 30$ $\dim = 40$ 4 5

 $\dim = 40$



 $\begin{array}{c|c}
\hline
2 & \hline
3 & \\
\hline
4 & \hline
5 & \\
\end{array}$

 $\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
\end{array} \quad \text{dim} = 40$

 $\begin{array}{c|c}
\hline
1 \\
\hline
2 \\
\hline
3 \\
\hline
5
\end{array}$ dim = 40

 $\begin{array}{c|c}
1 & 2 \\
\hline
3 & \\
\hline
4 & \\
\end{array}$

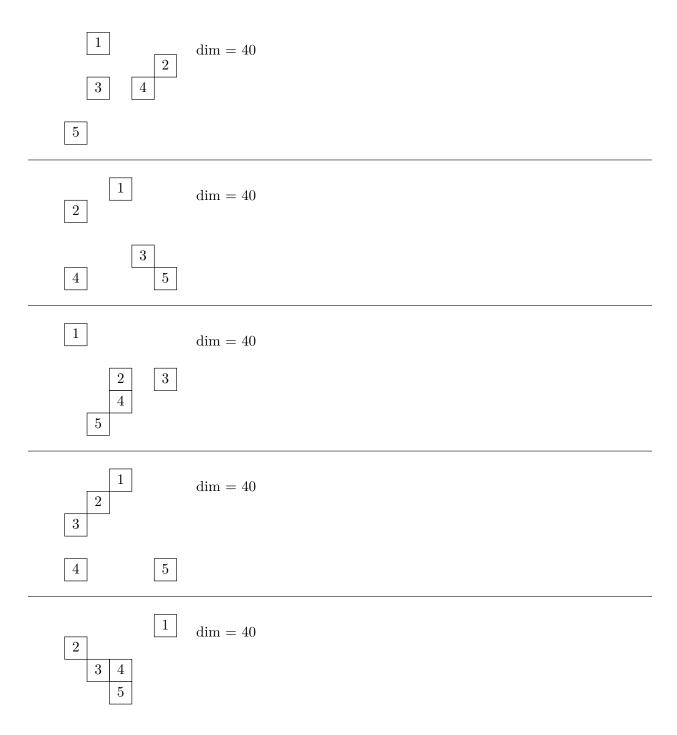
5

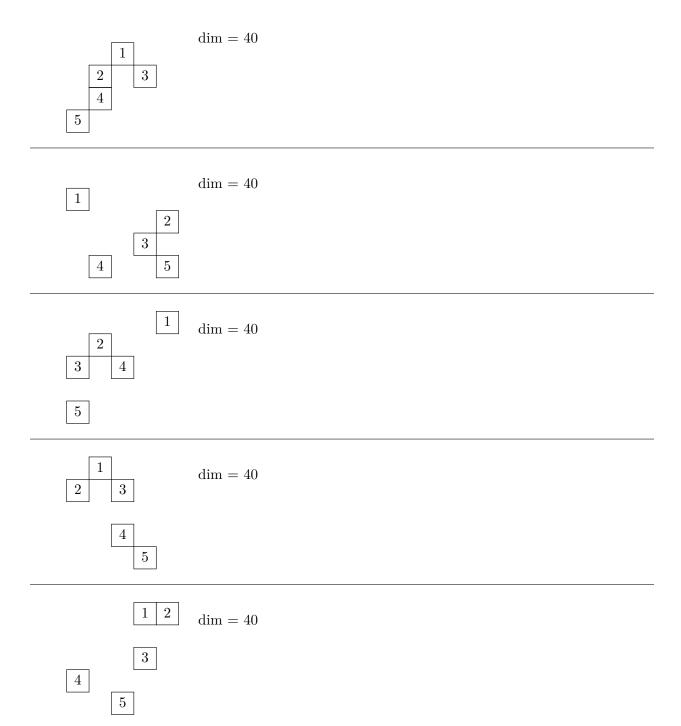
5

 $\boxed{1} \qquad \dim = 40$

 2
 3

 4
 5





$$\begin{array}{c|c}
\hline
1 \\
\hline
3 \\
\hline
4
\end{array}$$

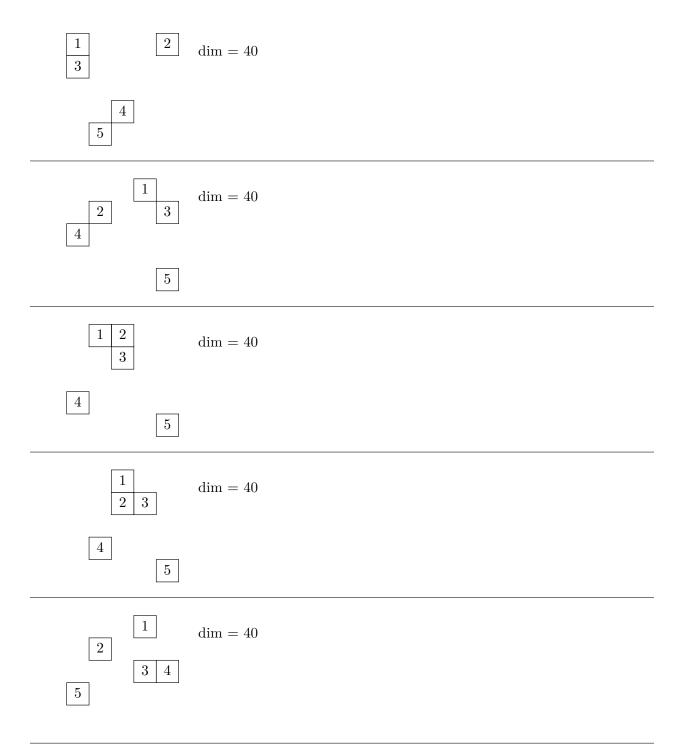
$$\overline{5}$$

$$\begin{array}{|c|c|c|} \hline 1 & 2 \\ \hline & 3 \\ \hline \end{array} \quad \dim = 40$$

 $\dim = 40$

 $\dim = 40$

 $1 \mid 2 \mid$ $\dim = 40$



$$\begin{array}{c|c}
\hline
2 & \hline
4 & \\
\hline
5 & \\
\end{array}$$
dim = 40

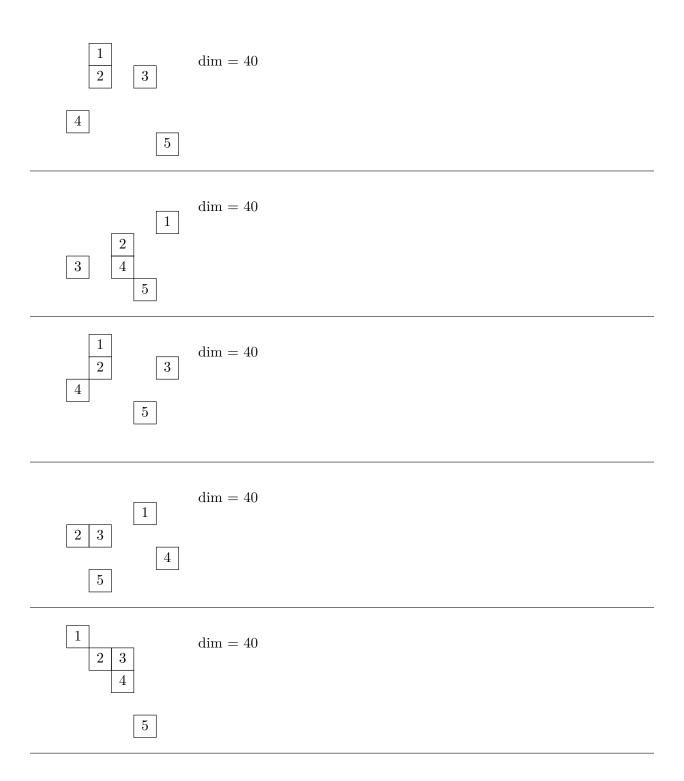
$$\begin{array}{c|c}
\hline
1 & \hline
3 & \\
\hline
4 & \\
\end{array}$$

$$\begin{array}{c|c}
\hline
2 & \dim = 40
\end{array}$$

$$\begin{array}{c|c}
 & \dim = 40 \\
\hline
 & 2 \\
\hline
 & 3 \\
\hline
 & 4 \\
\hline
 & 5 \\
\end{array}$$

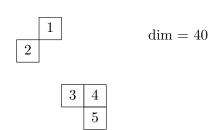
$$\begin{array}{c|c}
\hline
1 & & & \\
\hline
2 & & \\
\hline
3 & & 4
\end{array}$$

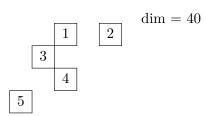
$$\begin{array}{c|c}
 & \dim = 40 \\
\hline
 & 2 \\
\hline
 & 3 \\
\hline
 & 5 \\
\end{array}$$



$$\begin{array}{c|c}
\hline
1 & \dim = 40 \\
\hline
3 & & \\
\hline
4 & 5 & & \\
\end{array}$$

$$\begin{array}{c}
\text{dim} = 40 \\
\hline
2 \\
\hline
4 \\
\hline
5
\end{array}$$





$$\begin{array}{c|c}
\hline
1 & \dim = 40 \\
\hline
3 & 4 & \\
\end{array}$$

$$\begin{array}{c|c}
\hline
2 \\
\hline
3 & 4
\end{array}$$

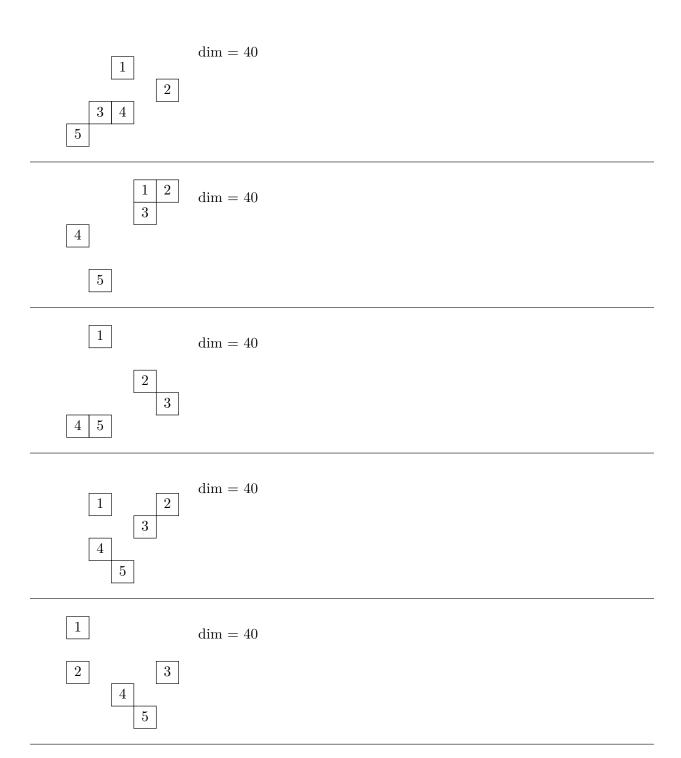
$$\boxed{\begin{array}{c|c} 1 \\ \hline 2 \\ \hline \end{array}} \quad \dim = 40$$

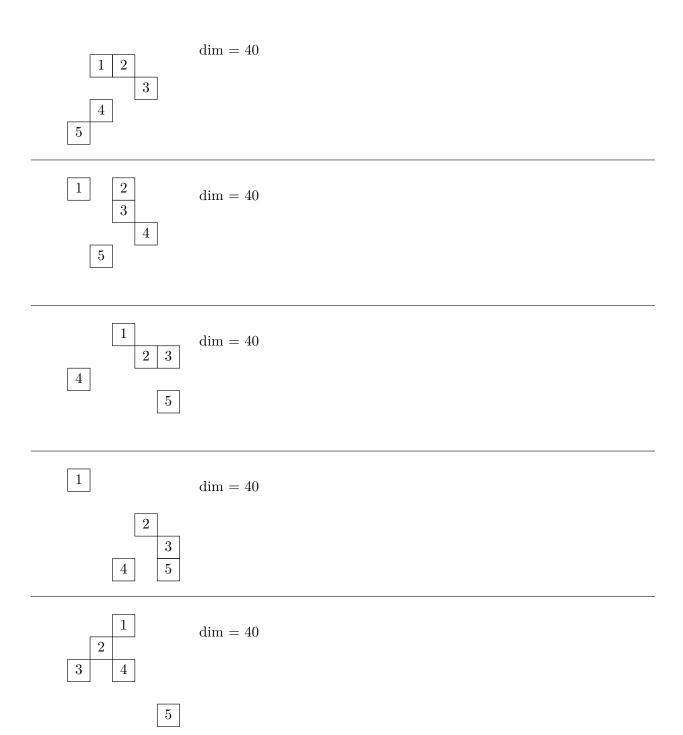
$$\begin{array}{c|c}
\hline
1 & 2 \\
\hline
3 & 3
\end{array}$$

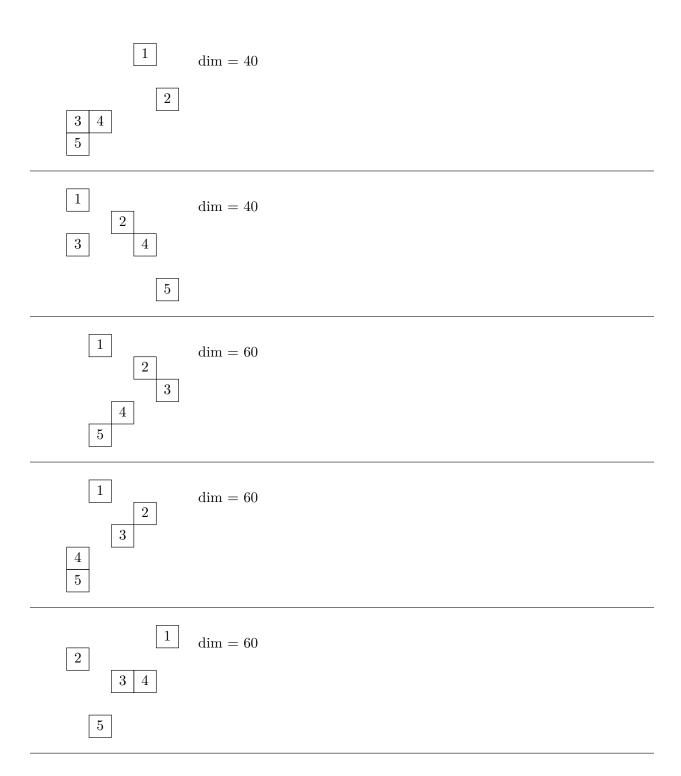
$$\boxed{1}$$

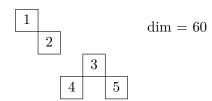
$$\dim = 40$$

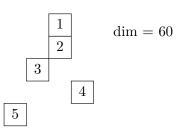
$$\boxed{1 \quad 2} \qquad \dim = 40$$

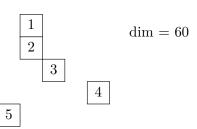


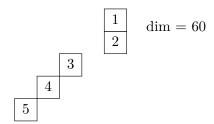


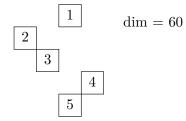


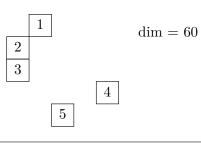


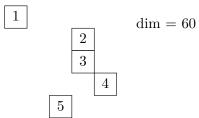


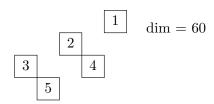


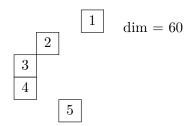




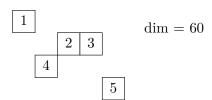


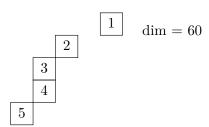


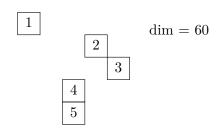




$$\begin{array}{c|c}
 & 1 & \dim = 60 \\
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 & 3 & \\
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\end{array}$$







$$\boxed{1} \qquad \dim = 60$$

$$\begin{array}{c|c}
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\end{array}$$