**Warm Up**
Grade 8
Oct. 30, 2023

Draw the views of the front, left, right and top.

-Include mat plan

9 blocks

Top/Mat

3	2
2	2
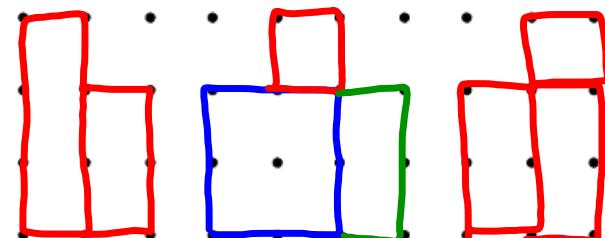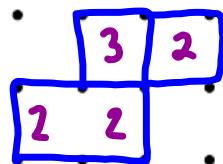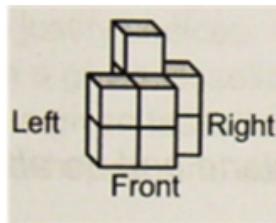
Left · Front · Right

Review for assessment

Model 4 × 2 using the box method
~~7   5~~

4a)

Top

Mat Plan

| 1 | 2 | 1 |

Left　　Front　Right

b)

Top

Mat Plan.

| 1 | 1 |
| 1 | 2 |

Left　Front　Right

Sample Solutions

4. a)

Top

Left Side   Front   Right Side

b)

Top

Left Side   Front   Right Side

c)

Top
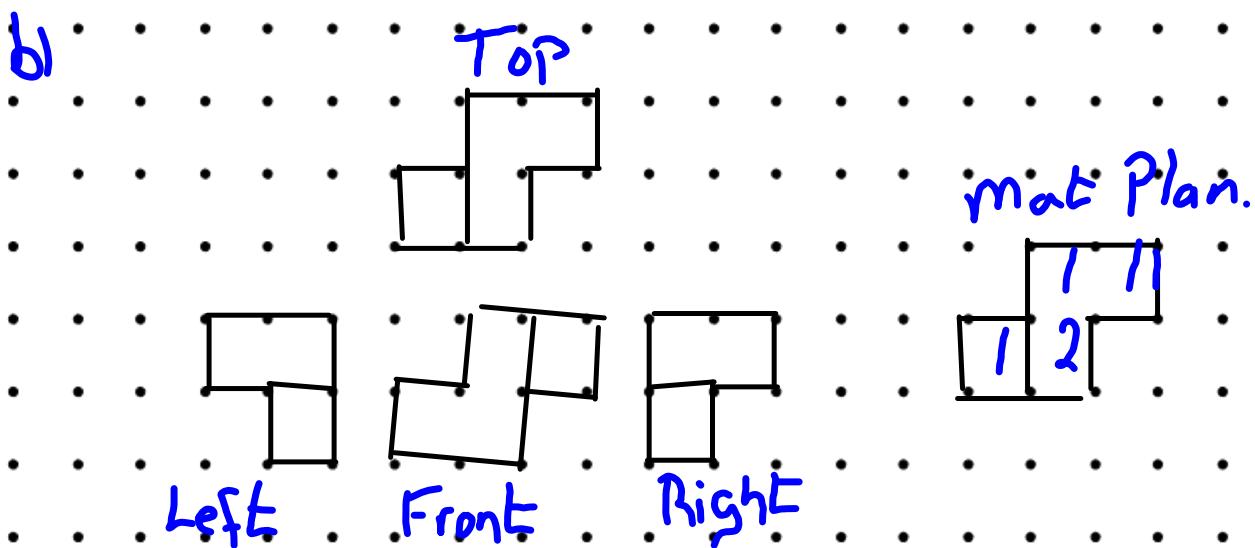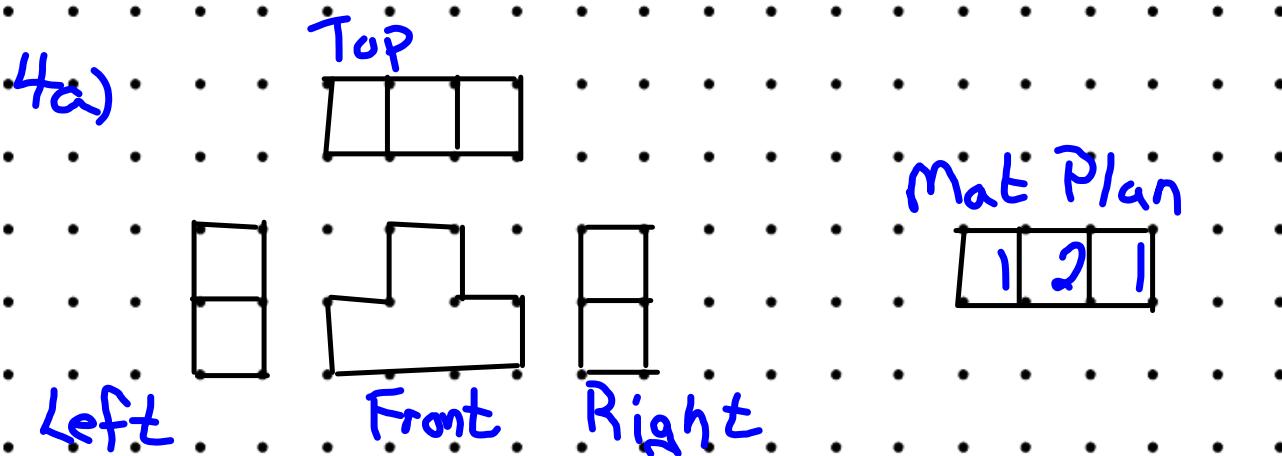
Left Side   Front   Right Side
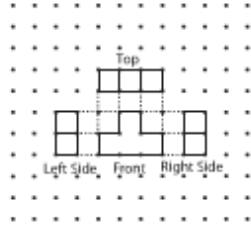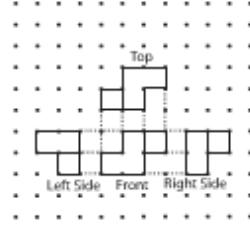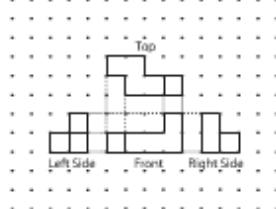
Sample Solutions

5.

	Top	Front	Back	Left Side	Right Side
A	P	N	N	N	N
B	N	N	N	Q	L
C	Q	Q	L	Q	L
D	J	Q	L	L	Q
E	K	Q	L	M	M

6.

Top

Left Side   Front   Right Side

7. a)

b)

c)

8.

Top

Left Side Front Right Side

9.

Top

Left Side Front Right Side

10.

Top

Left Side　Front　Right Side

12.

Top

Left Side　Front　Right Side

13.

Top

Left Side   Front   Right Side

14.

Top

Left Side   Front   Right Side
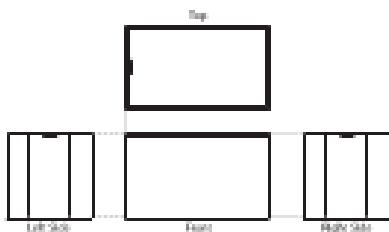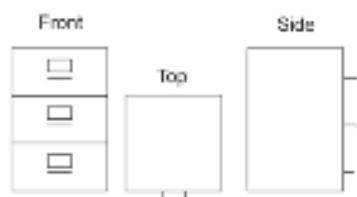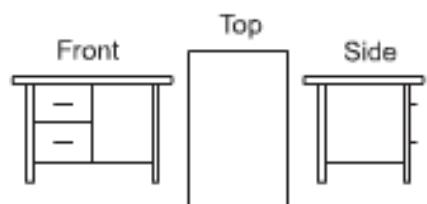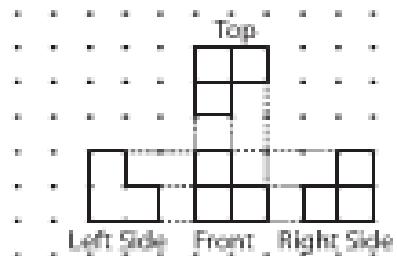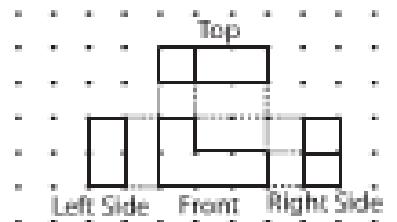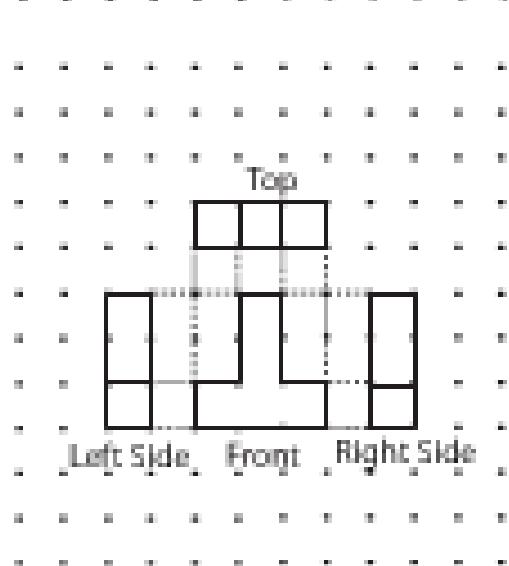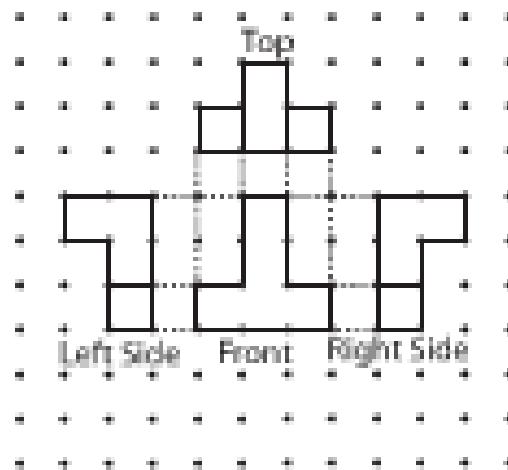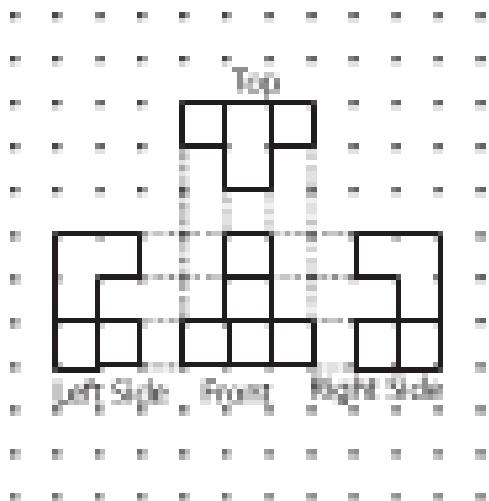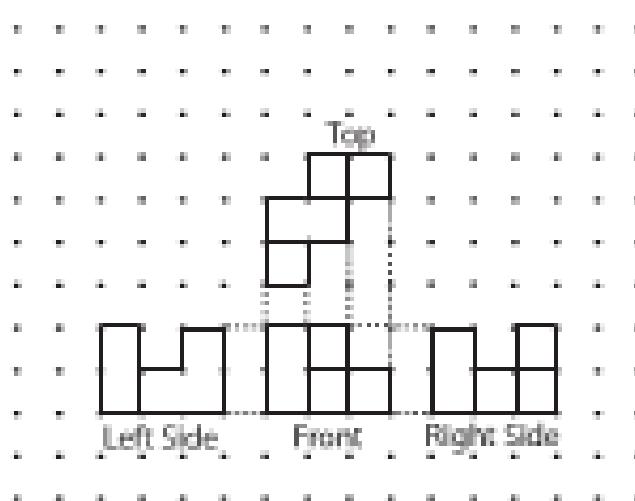
15. There are 7 possible objects.
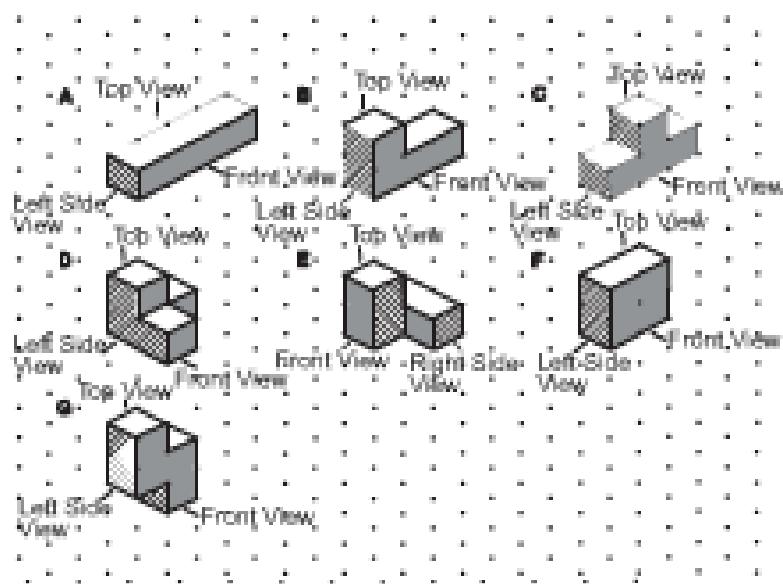
## Here are the views for each object.

16.

Left Side   Front   Right Side
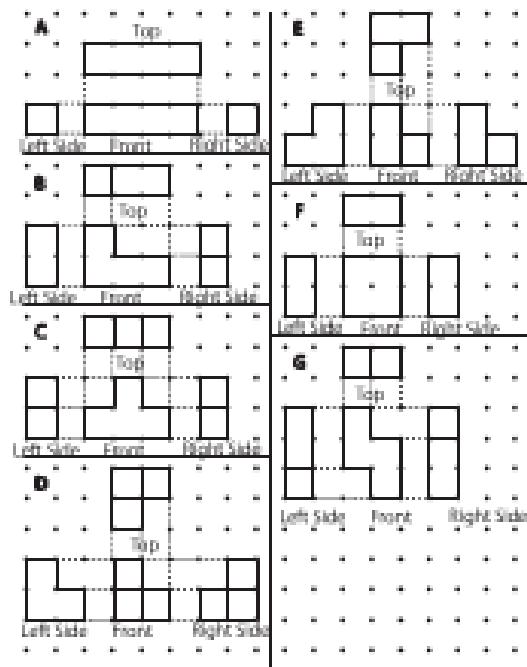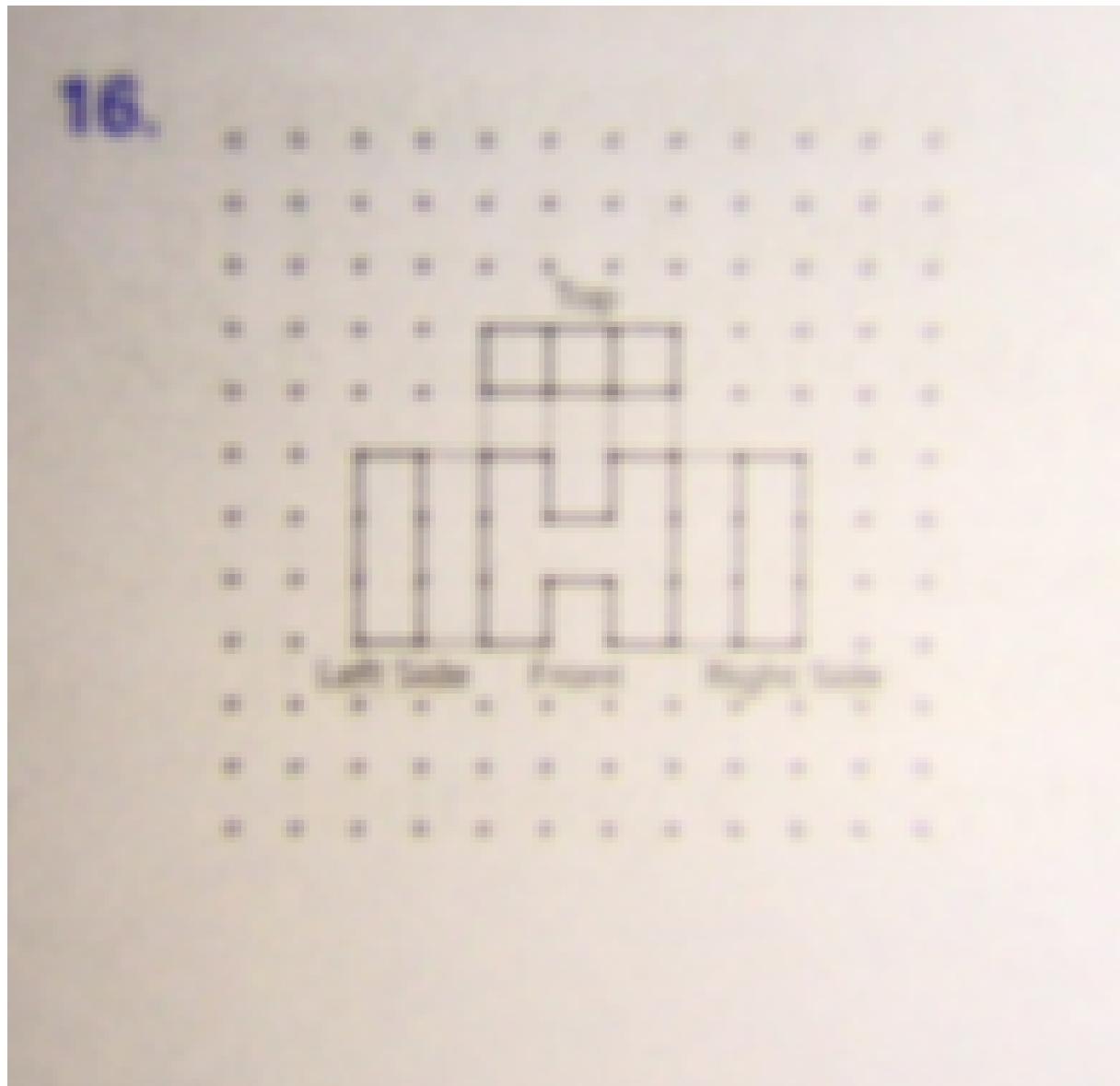
An axis can be rotated **horizontally**

-when an object is rotated horizontally the axis of rotations is vertical. (Can rotate clockwise or counterclockwise)
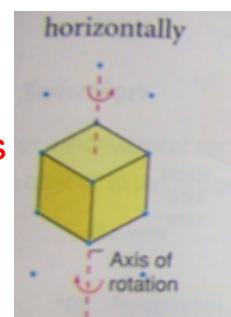
An axis can be rotated **vertically**

-when an object is rotated vertically the axis of rotations is horizontal. (Can rotate towards or away from you)
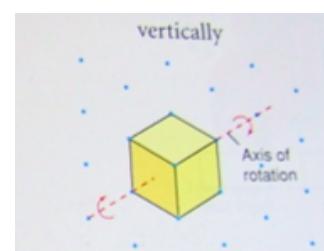
Always build then rotate

Draw the views (But let's put them in relation to each with the front in the center)

left   top

front   right
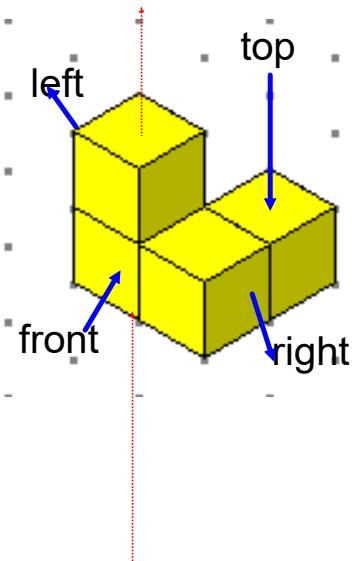
Square Dot Paper Grid Master

Top / Mat

Top/Mat

2 1 1
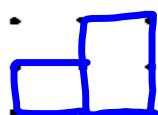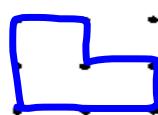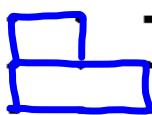
Left   Fr   Right

Same as last page but let's rotate horizontally 180° Now draw the views over (New front, new top, new left, new right)
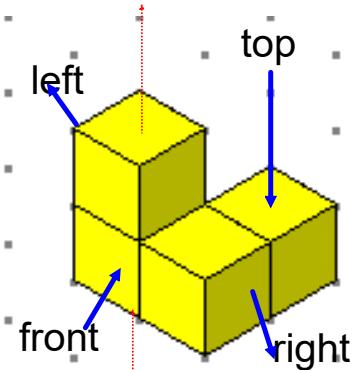
left
top
front
right

Square Dot Paper Grid Master

New Top/Mat

1 2
1
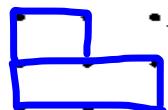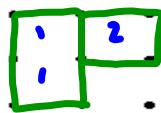
New Left   New Front   New R

Draw the views after we rotate vertically about the axis 180°.

top

left

front   right

Square Dot Paper Grid Master

New Top/Mat

2   1
     1
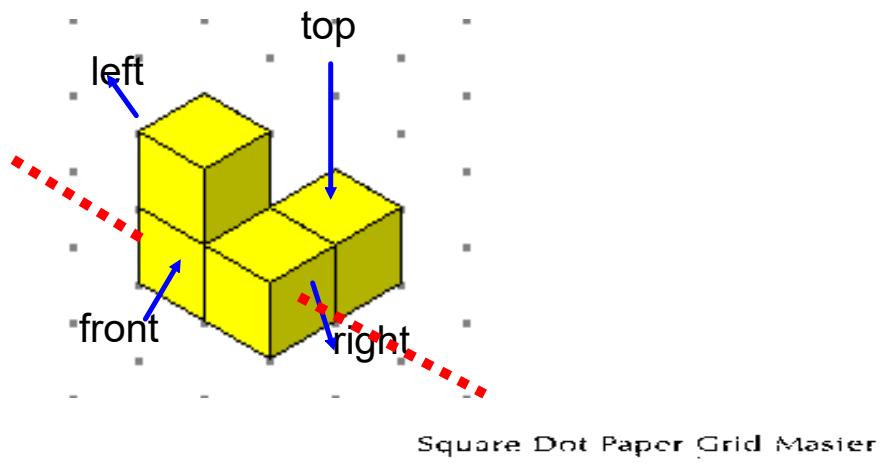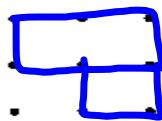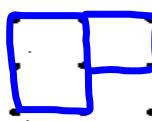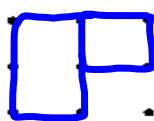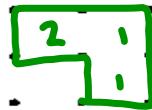
New Left   New Front   New R

Draw the views after we rotate horizontally 270º. (Which is the same as 90 degrees counterclockwise)

top

left

front

right
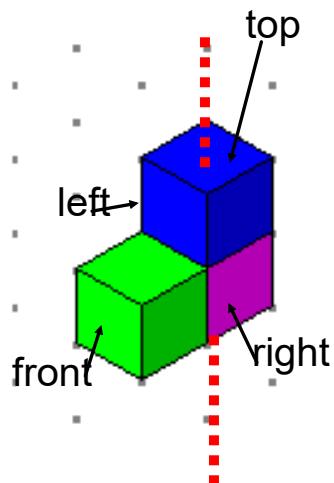
Square Dot Paper Grid Master

Original

2
1

L

Fr

New Top/Mat

2　1

New L　　New Front　　New R
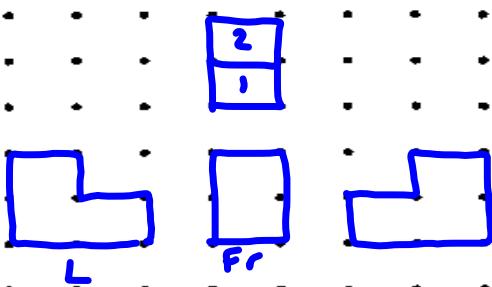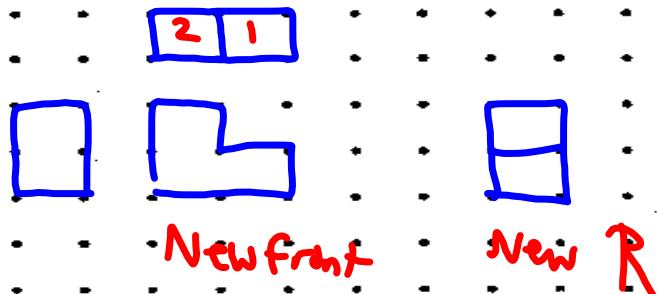
Class/Homework

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#3, #4, #~~5~~, 6, #7, #8, #9

3a) 270° clockwise (90° counter clockwise)

b)

c)

4a) NF→
    NL→
    NR→
    NT→

4b) NF→
    NL→
    NR→
    NT→

Front

Top

Right

left

front