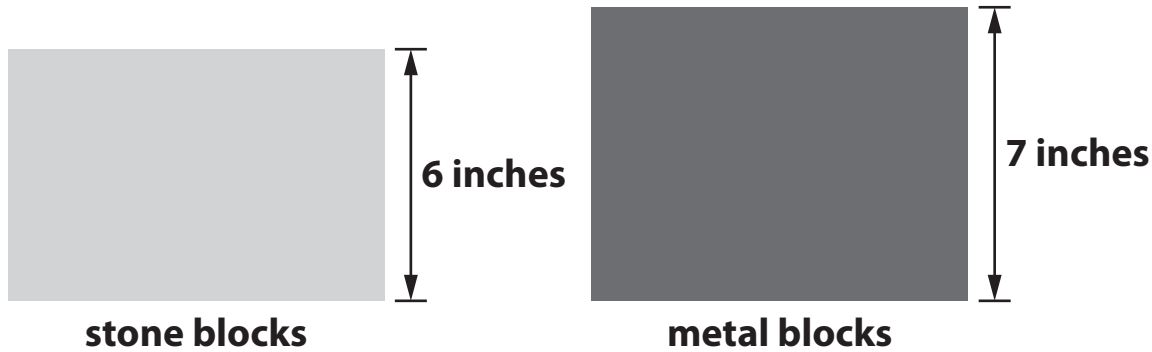


**Tall Towers****Your Challenge**

You want to build a tower that is between 75 and 85 inches tall.  
You have the following building materials.



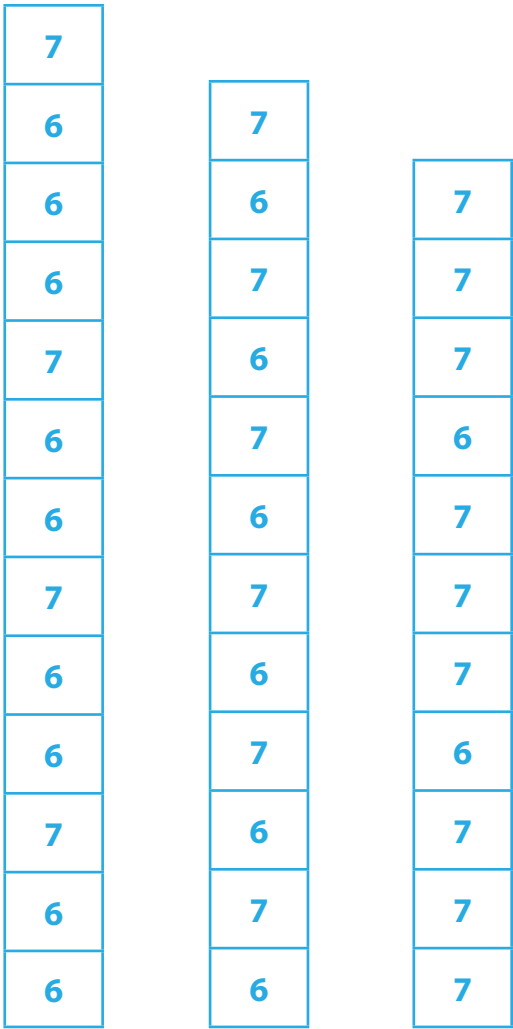
You cannot have more than 3 in a row of either block.

1. Find 3 different ways to build your tower.
2. What is the shortest tower you can make?
3. What is the tallest tower you can make?

Show your work on the **Recording Sheet**.

Tall Towers

Towers will vary. Possible answers given.

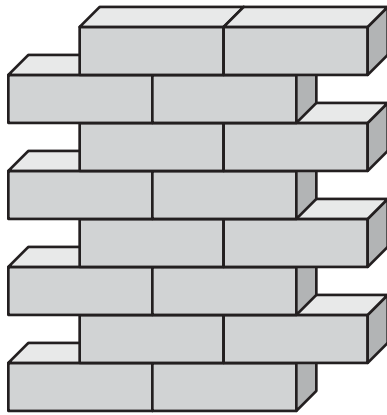
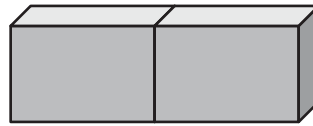


The shortest tower I can make is 75 inches tall and has 11 blocks.  
The tallest tower I can make is 85 inches tall and has 13 blocks.



**Building Walls****Your Challenge**

There are two walls being built. The wall made of clay bricks is already 32 inches tall. The wall made of stone bricks is already 8 inches tall.

**clay bricks****stone bricks**

How much taller is the clay brick wall than the stone brick wall?

**24 inches**

Each row of clay bricks is 4 inches tall.

Each row of stone bricks is 8 inches tall.

Both walls increase by one row at a time.

1. Make a table on the **Recording Sheet** to find the difference in their heights after every new row.
2. After how many new rows will both walls be the same height?
3. Look at the height difference in each row. What do you notice?

# Building Walls

1.

New Row	Clay Brick Wall Height	Stone Brick Wall Height	Height Difference
0	32	8	24
1	36	16	20
2	40	24	16
3	44	32	12
4	48	40	8
5	52	48	4
6	56	56	0

2. 6 rows.

3. The height difference decreases by 4 inches for each new row.

