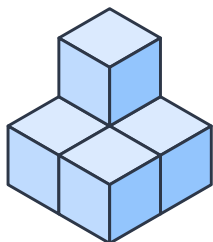


Counting Cubes

Count the cubes in each figure. Write how many.

Rule: No cubes are hidden except the ones holding others up.

Example



Count one layer at a time.

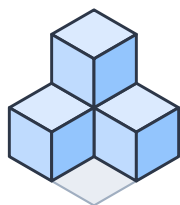
Bottom layer: 4 cubes

Top layer: 1 cube

$4 + 1 = 5$ cubes

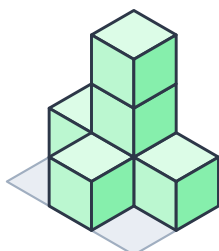
One bottom cube is hidden. It holds up the top cube.

1.



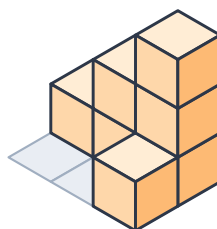
_____ cubes

2.



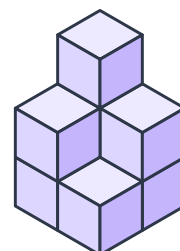
_____ cubes

3.



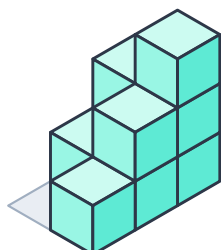
_____ cubes

4.



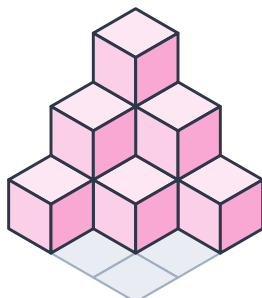
_____ cubes

5.



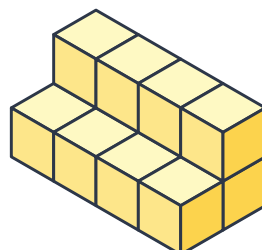
_____ cubes

6.



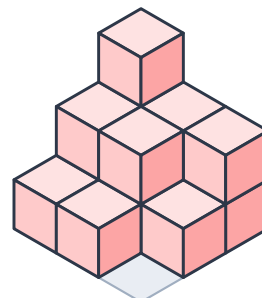
_____ cubes

7.



_____ cubes

8.



_____ cubes

Counting Cubes

Count the cubes in one layer and the layers. Fill in the table.

A

B

C

D

E

F

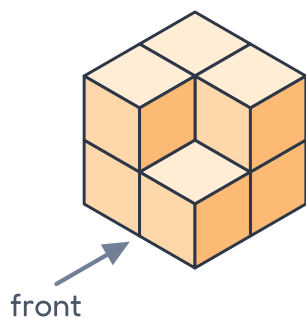
Figure	Cubes in 1 layer	Layers	Cubes in all
A Example	6	2	12
B	_____	_____	_____
C	_____	_____	_____
D	_____	_____	_____
E	_____	_____	_____
F	_____	_____	_____

Figure A: 1 layer is 2 rows of 3 = 6 cubes. 2 layers of 6 = 12 cubes.

Counting Cubes

Write the letter of the plan for each figure, and how many cubes.

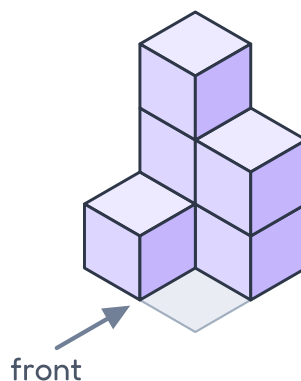
1.



Plan _____

Cubes _____

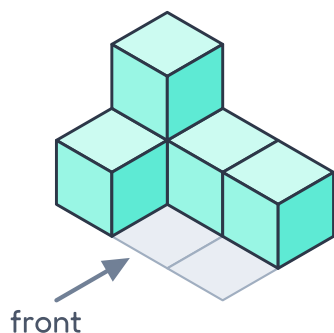
2.



Plan _____

Cubes _____

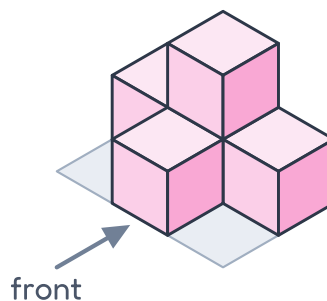
3.



Plan _____

Cubes _____

4.



Plan _____

Cubes _____

Building plans: the number of cubes on each square

A

3	2
1	

↑
front

B

1	1	3
		1

↑
front

C

2	2
2	1

↑
front

D

1	2	1
	1	

↑
front

E

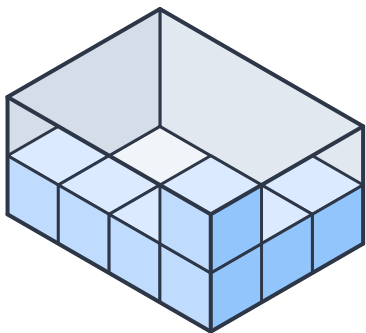
2	1	1
1		

↑
front

Counting Cubes

How many cubes fill each clear box? How many fill half of it?

1.



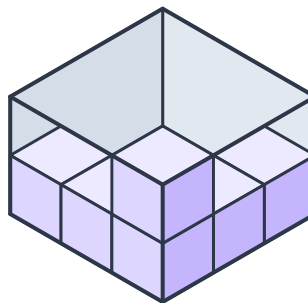
Cubes in 1 layer: _____

Layers: _____

Cubes to fill the box: _____

Cubes to fill half of it: _____

2.



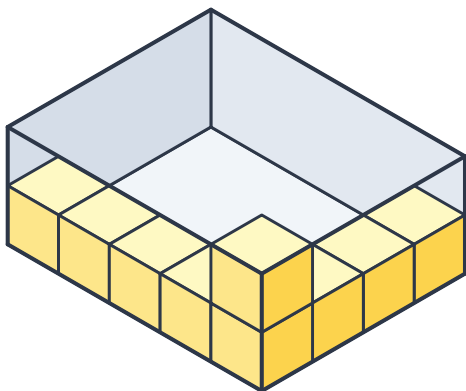
Cubes in 1 layer: _____

Layers: _____

Cubes to fill the box: _____

Cubes to fill half of it: _____

3.



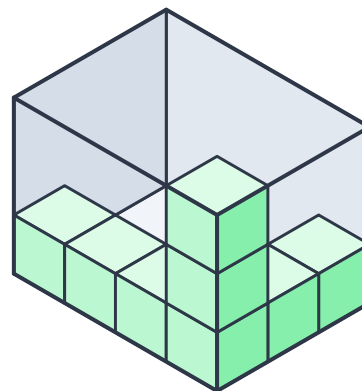
Cubes in 1 layer: _____

Layers: _____

Cubes to fill the box: _____

Cubes to fill half of it: _____

4.



Cubes in 1 layer: _____

Layers: _____

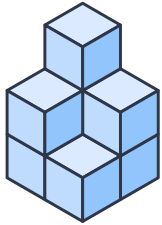
Cubes to fill the box: _____

Cubes to fill half of it: _____

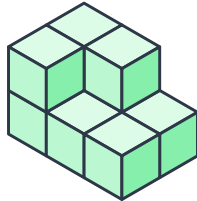
Counting Cubes

Compare the figures, then solve each problem.

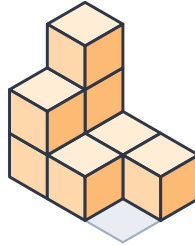
Write how many cubes. Circle the figure with more cubes.



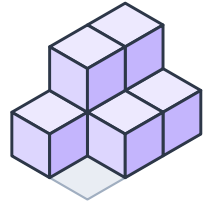
_____ cubes



_____ cubes



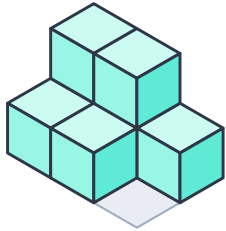
_____ cubes



_____ cubes

How many more cubes make the box shape?

Lena wants a box shape **3** cubes long, **2** wide, and **2** high.

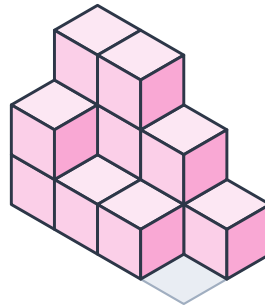


Full: _____

Now: _____

More: _____

Omar wants a box shape **4** cubes long, **2** wide, and **3** high.



Full: _____

Now: _____

More: _____

Solve.

- 1.** A box is **3** cubes long, **2** wide, and **2** high. How many cubes fill it?

_____ cubes

- 2.** A box holds **3** layers of **8** cubes each. How many cubes fill it?

_____ cubes

- 3.** A box holds **30** cubes when it is full. How many cubes fill half of it?

_____ cubes

- 4.** Max puts **20** cubes in layers of **5**. How many layers does he make?

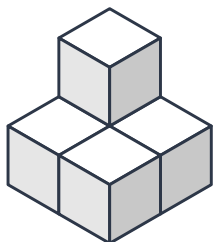
_____ layers

Counting Cubes

Count the cubes in each figure. Write how many.

Rule: No cubes are hidden except the ones holding others up.

Example



Count one layer at a time.

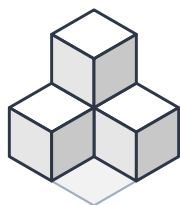
Bottom layer: 4 cubes

Top layer: 1 cube

$4 + 1 = \underline{5}$ cubes

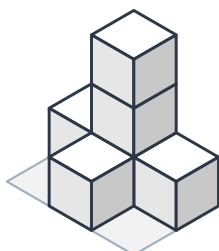
One bottom cube is hidden. It holds up the top cube.

1.



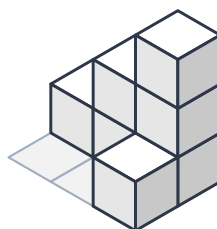
_____ cubes

2.



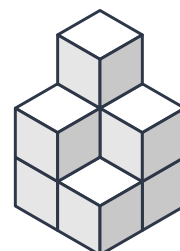
_____ cubes

3.



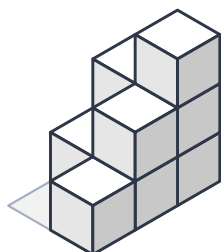
_____ cubes

4.



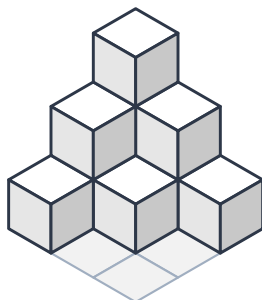
_____ cubes

5.



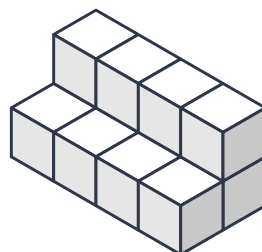
_____ cubes

6.



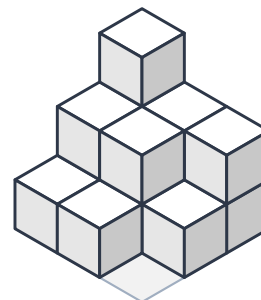
_____ cubes

7.



_____ cubes

8.



_____ cubes

Counting Cubes

Count the cubes in one layer and the layers. Fill in the table.

A

B

C

D

E

F

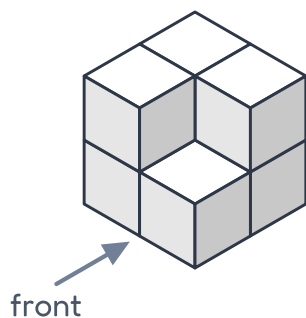
Figure	Cubes in 1 layer	Layers	Cubes in all
A Example	6	2	12
B	_____	_____	_____
C	_____	_____	_____
D	_____	_____	_____
E	_____	_____	_____
F	_____	_____	_____

Figure A: 1 layer is 2 rows of 3 = 6 cubes. 2 layers of 6 = 12 cubes.

Counting Cubes

Write the letter of the plan for each figure, and how many cubes.

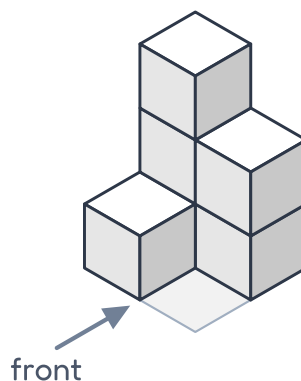
1.



Plan _____

Cubes _____

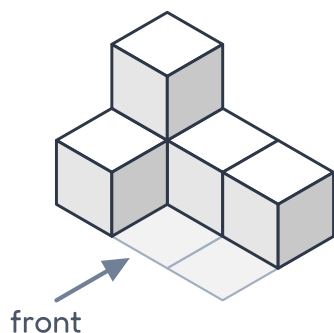
2.



Plan _____

Cubes _____

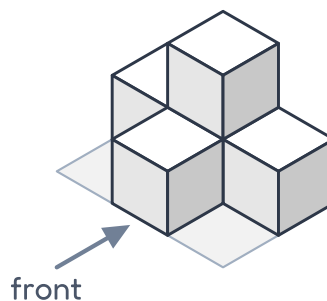
3.



Plan _____

Cubes _____

4.



Plan _____

Cubes _____

Building plans: the number of cubes on each square

A

3	2
1	

front

B

1	1	3
		1

front

C

2	2
2	1

front

D

1	2	1
	1	

front

E

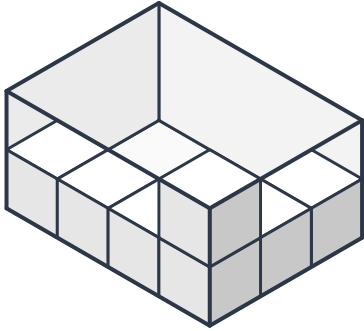
2	1	1
1		

front

Counting Cubes

How many cubes fill each clear box? How many fill half of it?

1.



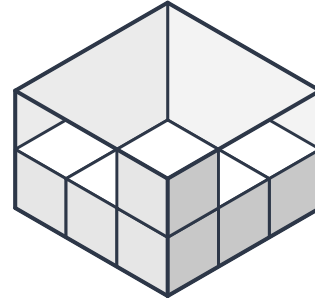
Cubes in 1 layer: _____

Layers: _____

Cubes to fill the box: _____

Cubes to fill half of it: _____

2.



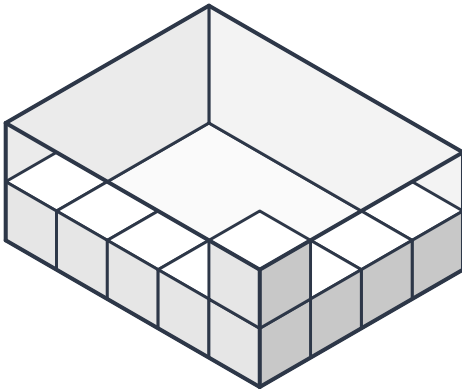
Cubes in 1 layer: _____

Layers: _____

Cubes to fill the box: _____

Cubes to fill half of it: _____

3.



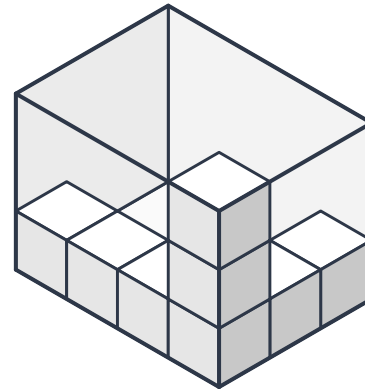
Cubes in 1 layer: _____

Layers: _____

Cubes to fill the box: _____

Cubes to fill half of it: _____

4.



Cubes in 1 layer: _____

Layers: _____

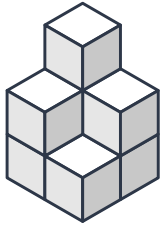
Cubes to fill the box: _____

Cubes to fill half of it: _____

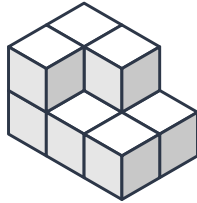
Counting Cubes

Compare the figures, then solve each problem.

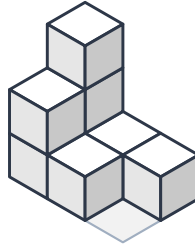
Write how many cubes. Circle the figure with more cubes.



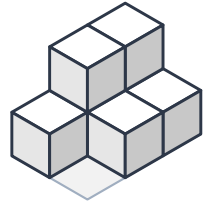
_____ cubes



_____ cubes



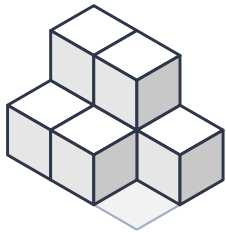
_____ cubes



_____ cubes

How many more cubes make the box shape?

Lena wants a box shape **3** cubes long, **2** wide, and **2** high.

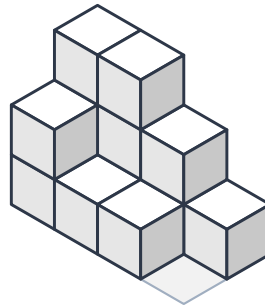


Full: _____

Now: _____

More: _____

Omar wants a box shape **4** cubes long, **2** wide, and **3** high.



Full: _____

Now: _____

More: _____

Solve.

- 1.** A box is **3** cubes long, **2** wide, and **2** high. How many cubes fill it?

_____ cubes

- 2.** A box holds **3** layers of **8** cubes each. How many cubes fill it?

_____ cubes

- 3.** A box holds **30** cubes when it is full. How many cubes fill half of it?

_____ cubes

- 4.** Max puts **20** cubes in layers of **5**. How many layers does he make?

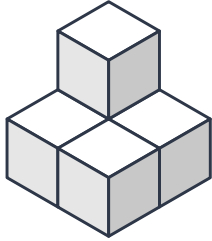
_____ layers

Counting Cubes

Count the cubes in each figure. Write how many.

Rule: No cubes are hidden except the ones holding others up.

Example



Count one layer at a time.

Bottom layer: 4 cubes

Top layer: 1 cube

$4 + 1 = \underline{5}$ cubes

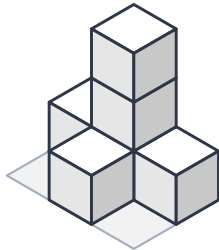
One bottom cube is hidden. It holds up the top cube.

1.



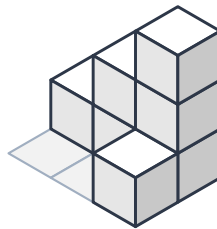
$\underline{4}$ cubes

2.



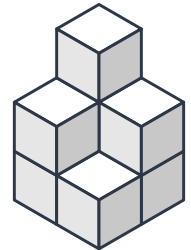
$\underline{6}$ cubes

3.



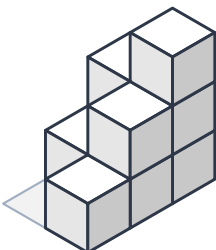
$\underline{7}$ cubes

4.



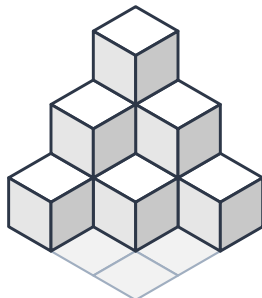
$\underline{8}$ cubes

5.



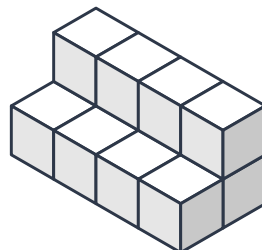
$\underline{9}$ cubes

6.



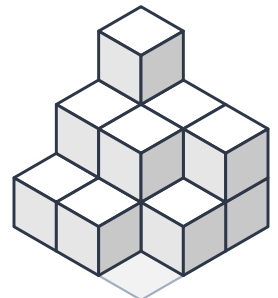
$\underline{10}$ cubes

7.



$\underline{12}$ cubes

8.



$\underline{14}$ cubes

Counting Cubes

Count the cubes in one layer and the layers. Fill in the table.

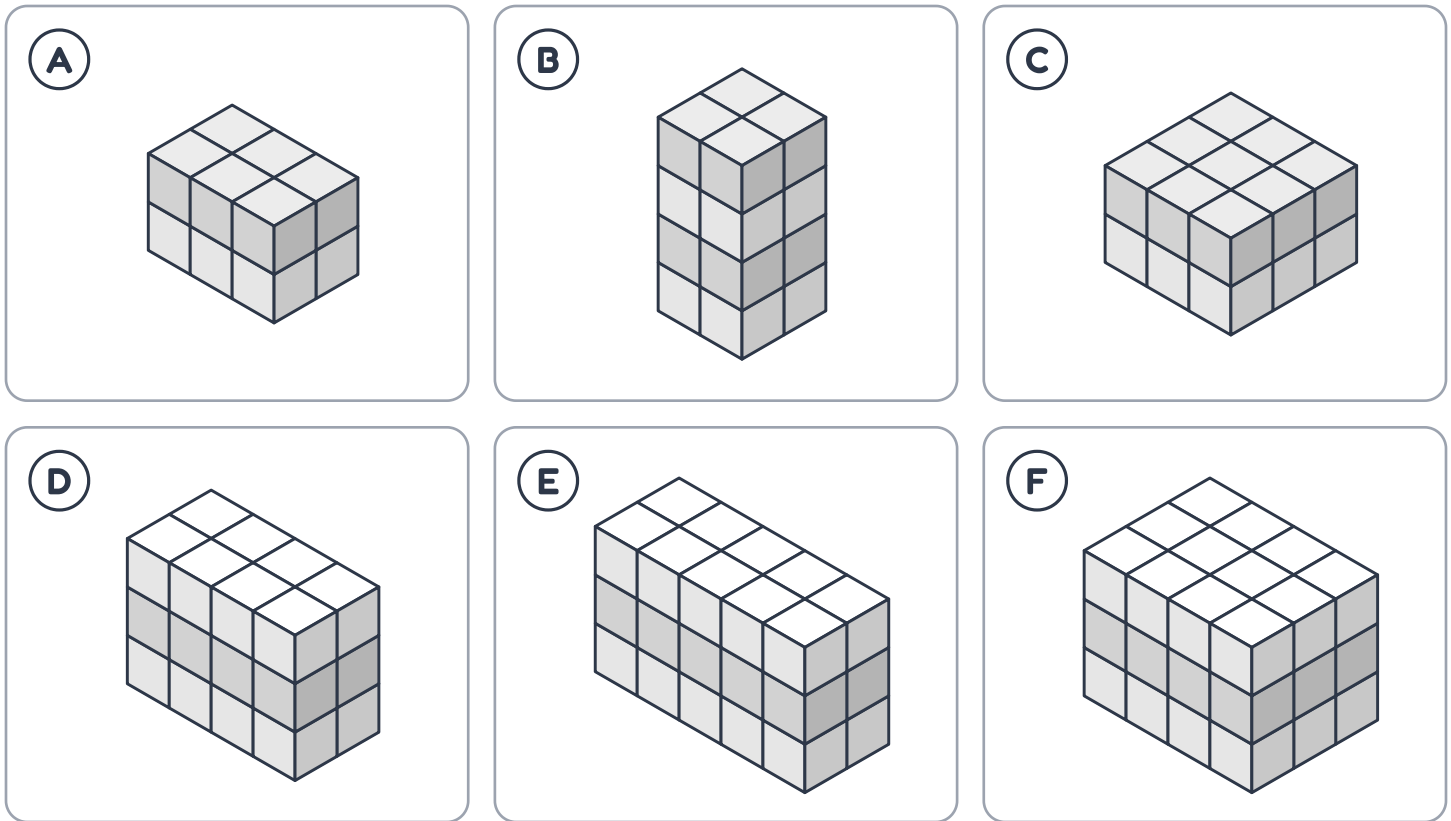


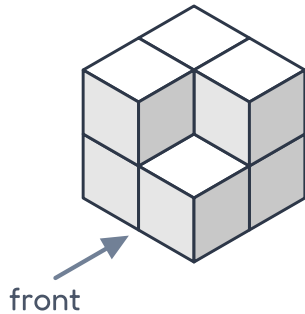
Figure	Cubes in 1 layer	Layers	Cubes in all
A Example	<u>6</u>	<u>2</u>	<u>12</u>
B	<u>4</u>	<u>4</u>	<u>16</u>
C	<u>9</u>	<u>2</u>	<u>18</u>
D	<u>8</u>	<u>3</u>	<u>24</u>
E	<u>10</u>	<u>3</u>	<u>30</u>
F	<u>12</u>	<u>3</u>	<u>36</u>

Figure A: 1 layer is 2 rows of 3 = 6 cubes. 2 layers of 6 = 12 cubes.

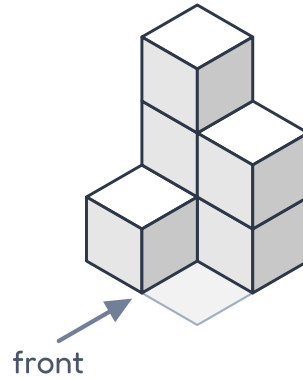
Counting Cubes

Write the letter of the plan for each figure, and how many cubes.

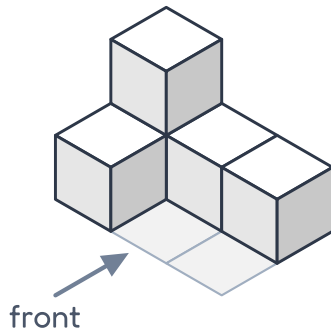
1.

Plan CCubes 7

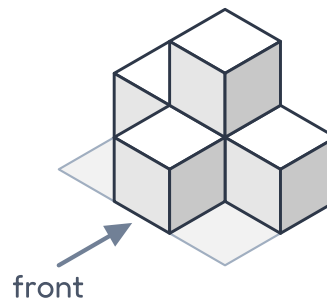
2.

Plan ACubes 6

3.

Plan ECubes 5

4.

Plan DCubes 5

Building plans: the number of cubes on each square

(A)



front

(B)



front

(C)



front

(D)



front

(E)

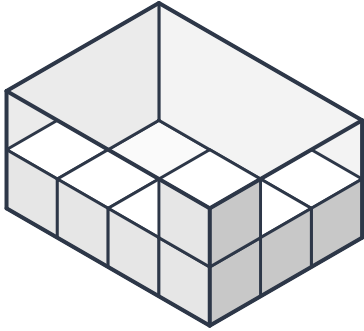


front

Counting Cubes

How many cubes fill each clear box? How many fill half of it?

1.



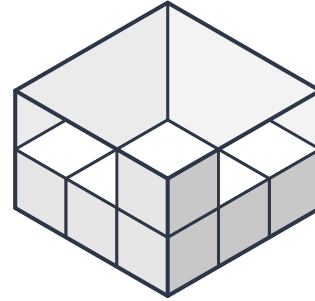
Cubes in 1 layer: 12

Layers: 2

Cubes to fill the box: 24

Cubes to fill half of it: 12

2.



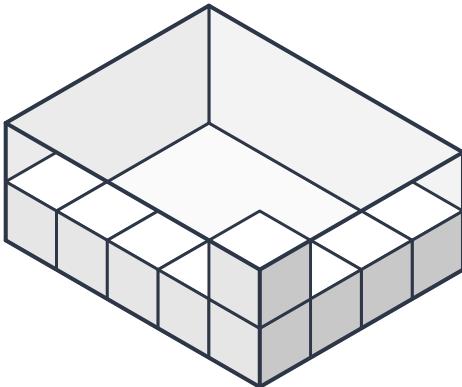
Cubes in 1 layer: 9

Layers: 2

Cubes to fill the box: 18

Cubes to fill half of it: 9

3.



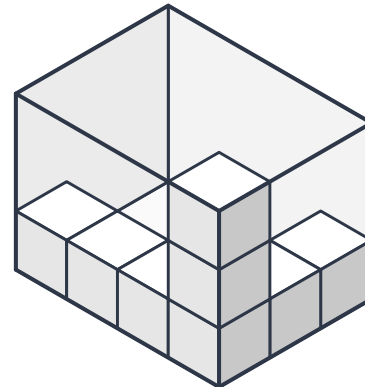
Cubes in 1 layer: 20

Layers: 2

Cubes to fill the box: 40

Cubes to fill half of it: 20

4.



Cubes in 1 layer: 12

Layers: 3

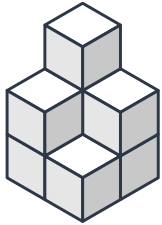
Cubes to fill the box: 36

Cubes to fill half of it: 18

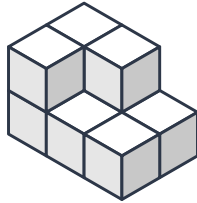
Counting Cubes

Compare the figures, then solve each problem.

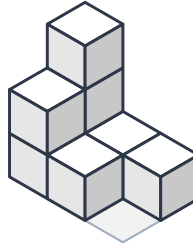
Write how many cubes. Circle the figure with more cubes.



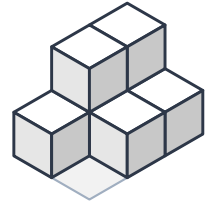
8 cubes



9 cubes



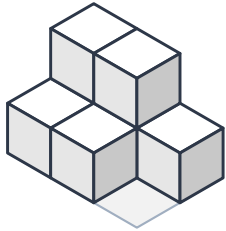
8 cubes



7 cubes

How many more cubes make the box shape?

Lena wants a box shape **3** cubes long, **2** wide, and **2** high.

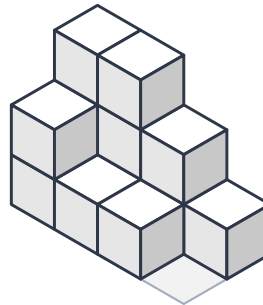


Full: 12

Now: 7

More: 5

Omar wants a box shape **4** cubes long, **2** wide, and **3** high.



Full: 24

Now: 13

More: 11

Solve.

1. A box is **3** cubes long, **2** wide, and **2** high. How many cubes fill it?
12 cubes

2. A box holds **3** layers of **8** cubes each. How many cubes fill it?
24 cubes

3. A box holds **30** cubes when it is full. How many cubes fill half of it?
15 cubes

4. Max puts **20** cubes in layers of **5**. How many layers does he make?
4 layers