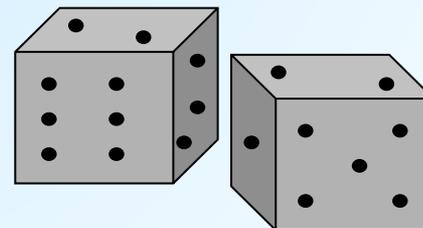
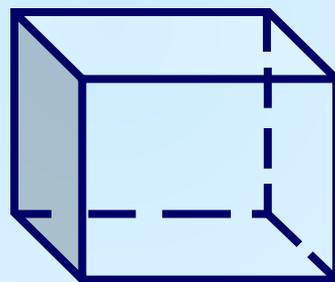
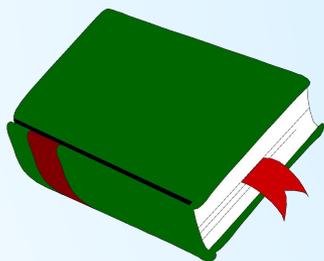
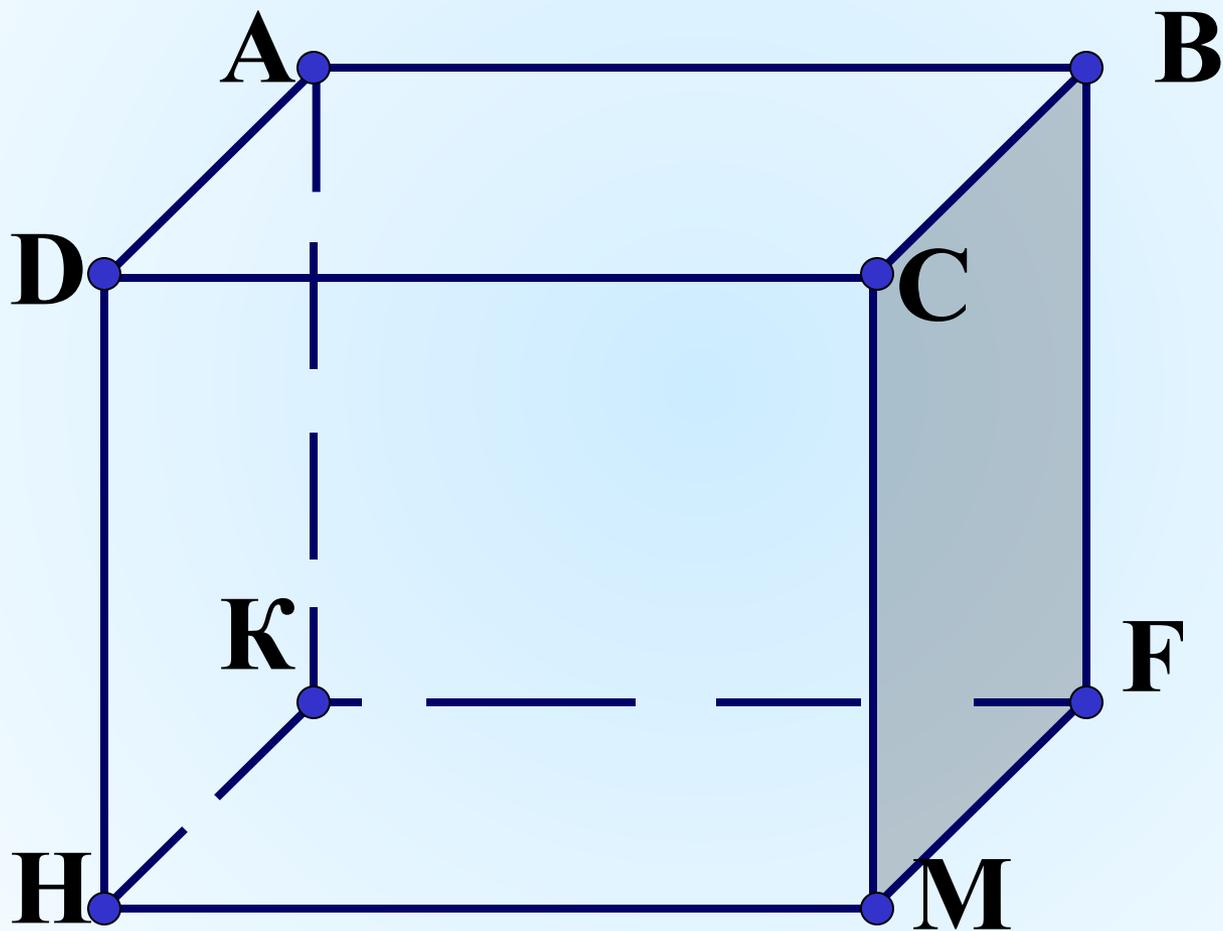


Прямоугольный параллелепипед

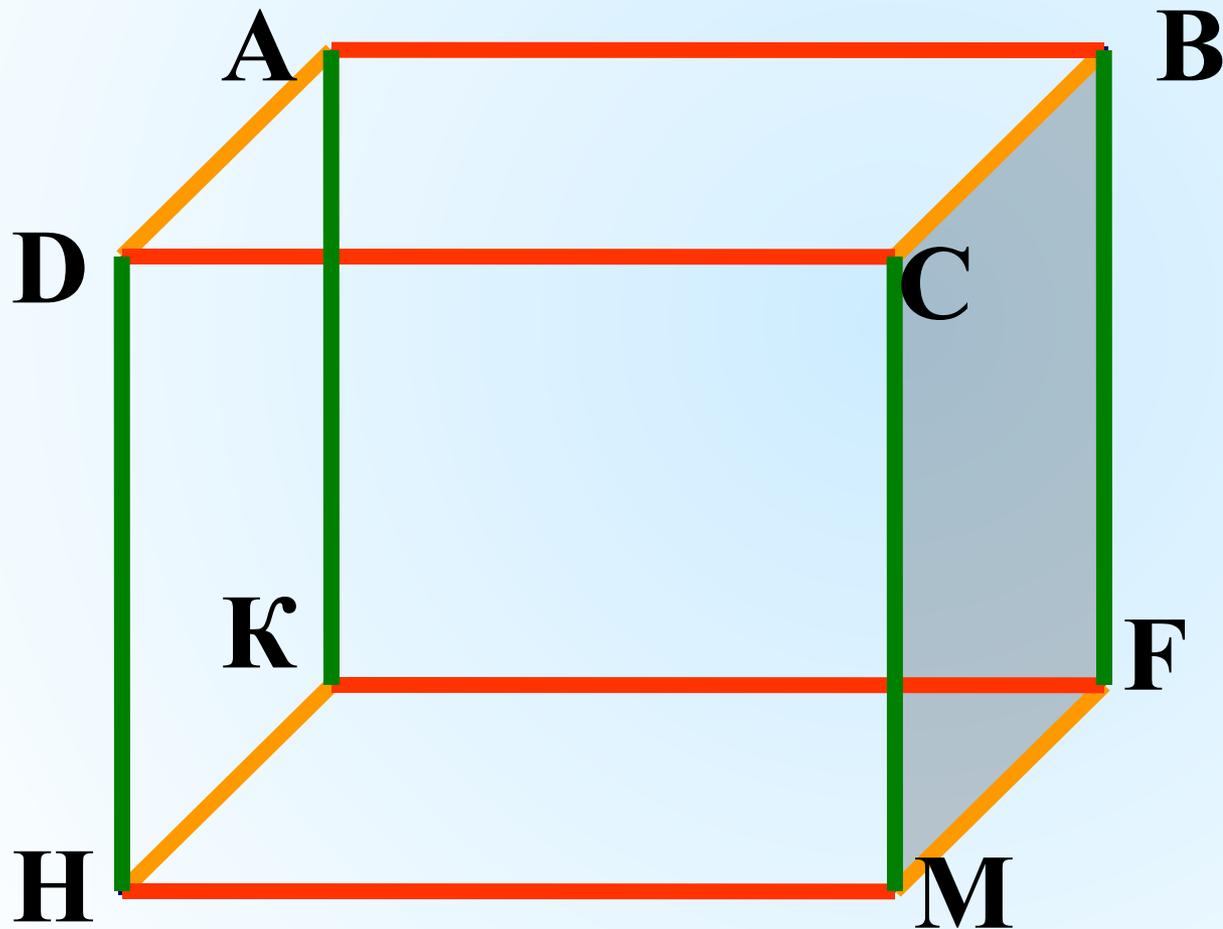


вершины



рёбра

ИЗМЕРЕНИЯ



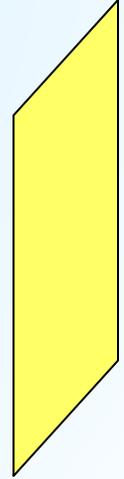
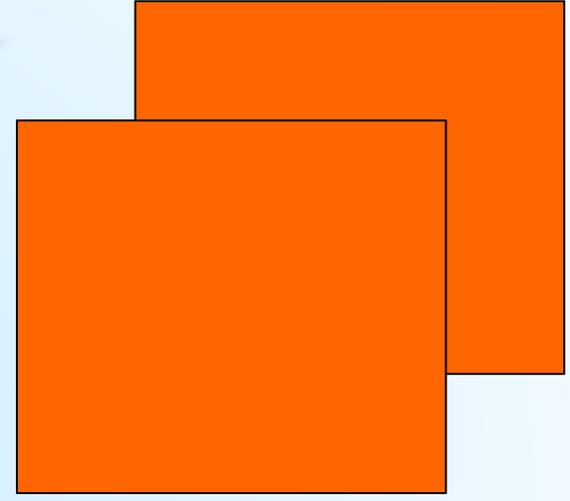
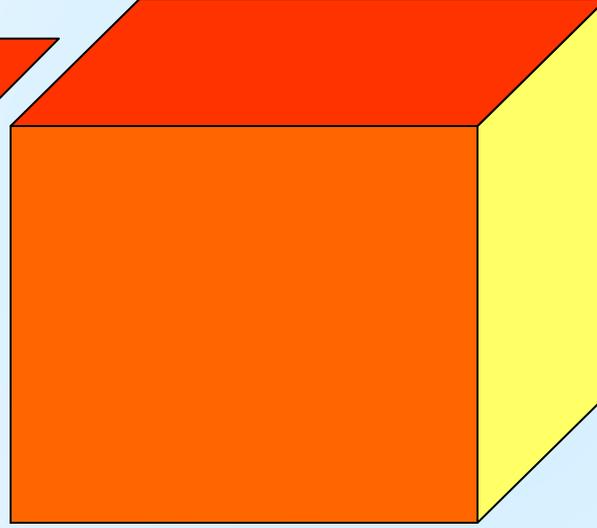
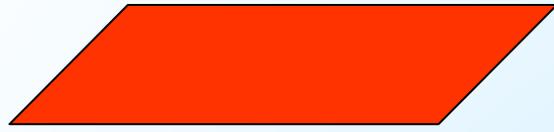
длина

ширина

высота

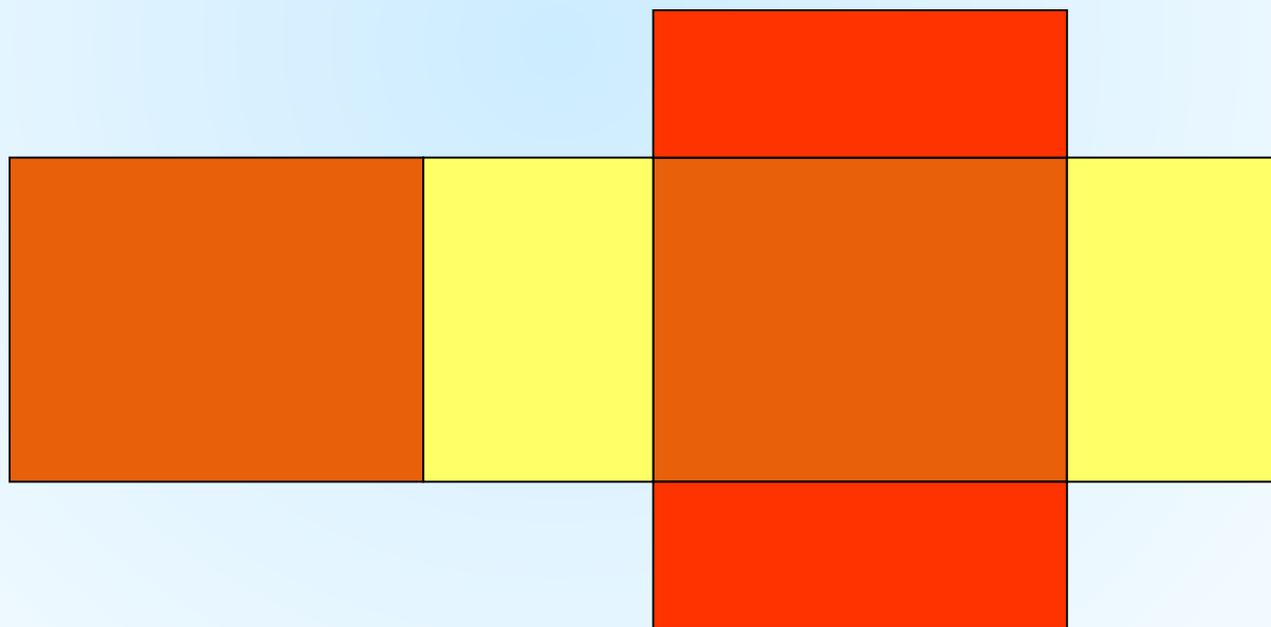
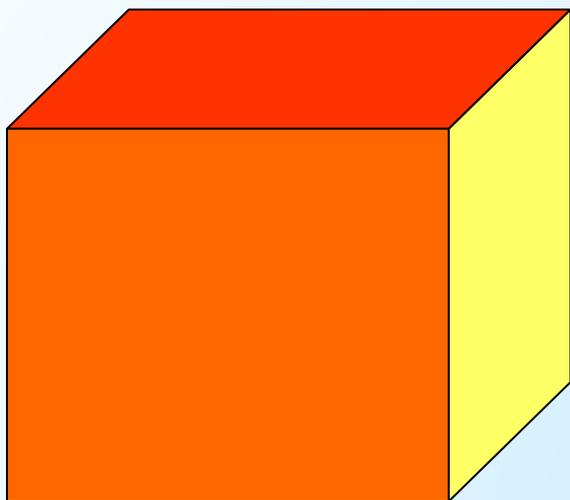
границы

прямоугольники

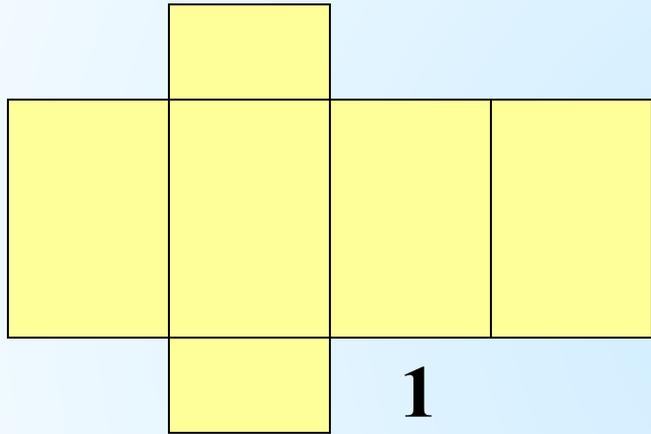


Противоположные
границы равны !

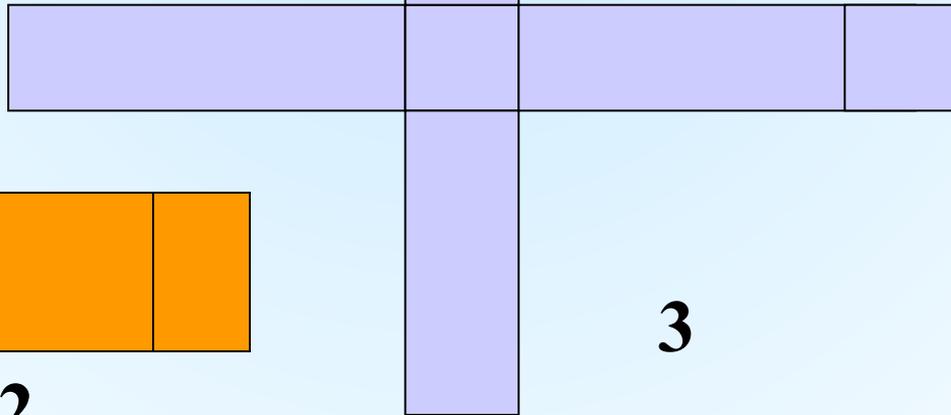
развёртка



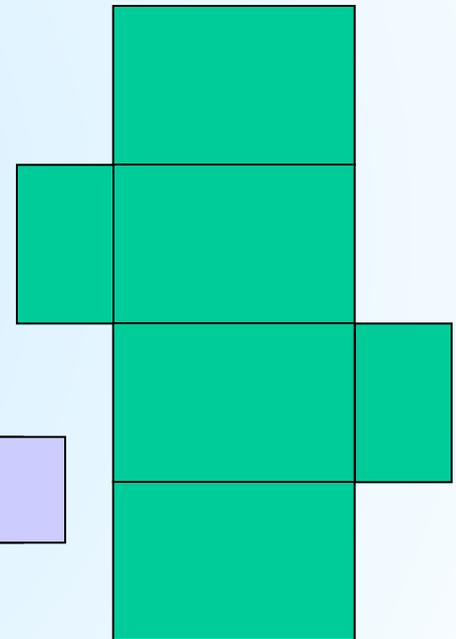
Какие из фигур могут быть развёртками прямоугольного параллелепипеда?



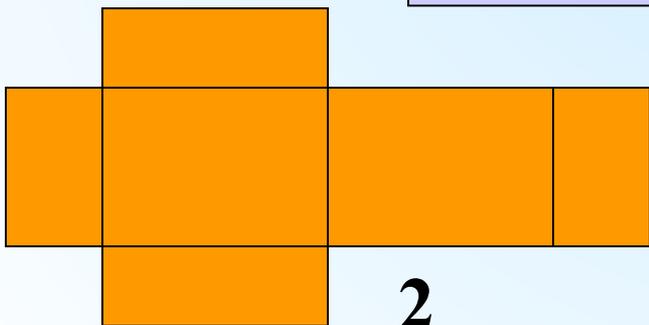
1



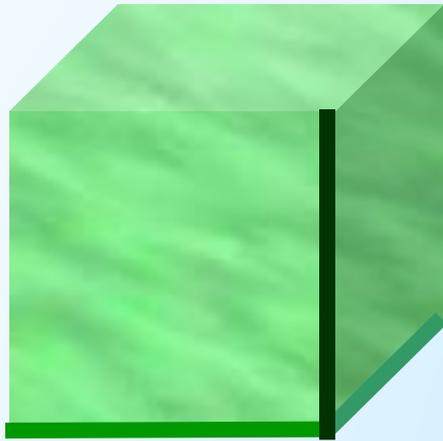
3



4



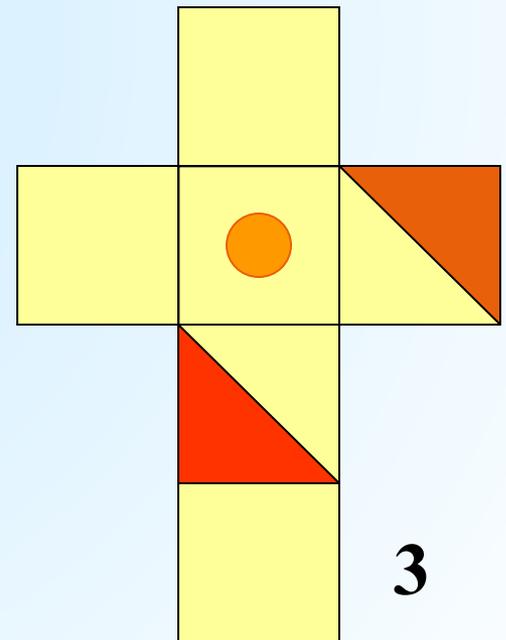
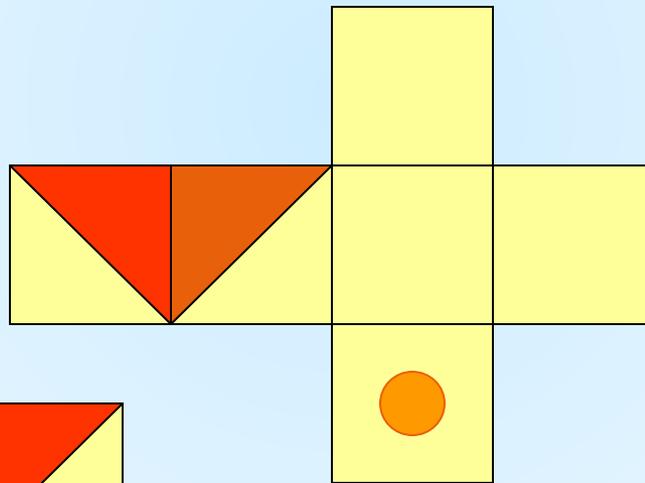
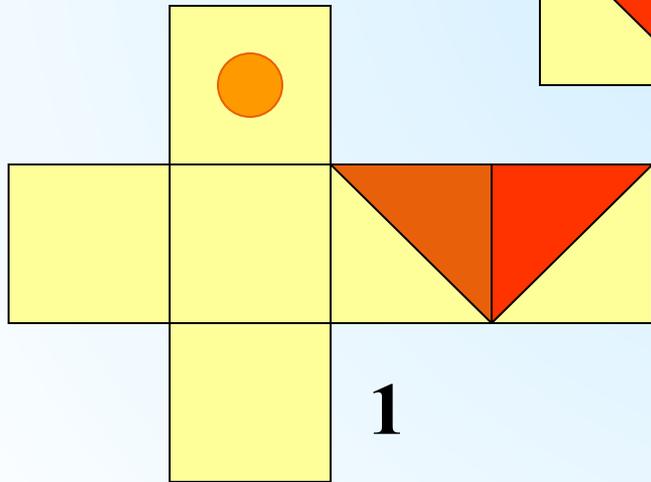
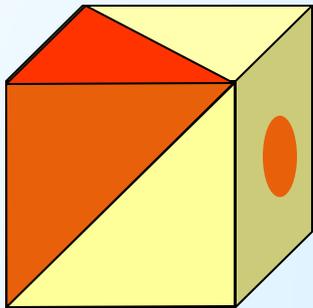
2



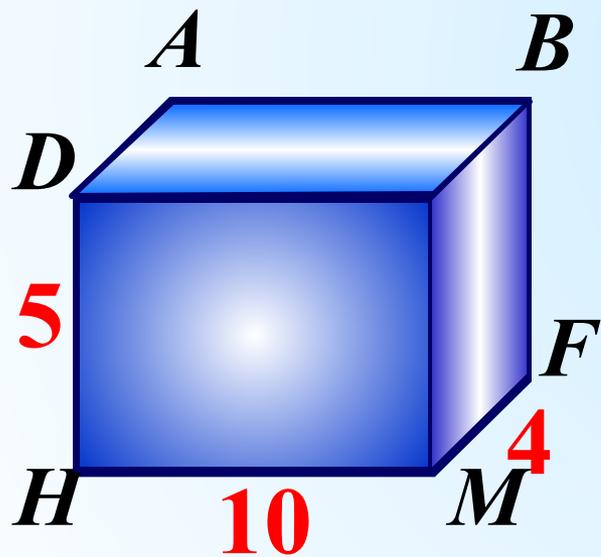
**Куб-
прямоугольный
параллелепипед,
у которого все
измерения равны**

*Какими геометрическими
фигурами являются грани
куба?*

Какие из фигур не могут быть развёртками куба?

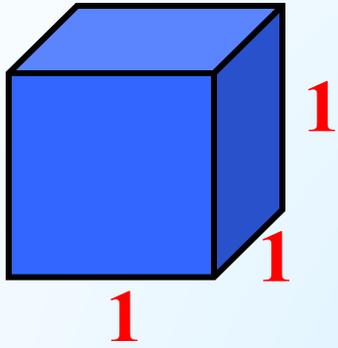


*Вычислить общую длину всех рёбер и
площадь поверхности
прямоугольного параллелепипеда,
если его измерения 10см, 5см, 4см.*



$$L = 4 \cdot (10 + 5 + 4) = 76 \text{ см};$$

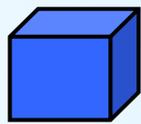
$$S = 2 \cdot (10 \cdot 5 + 10 \cdot 4 + 5 \cdot 4) = 220 \text{ см}^2$$



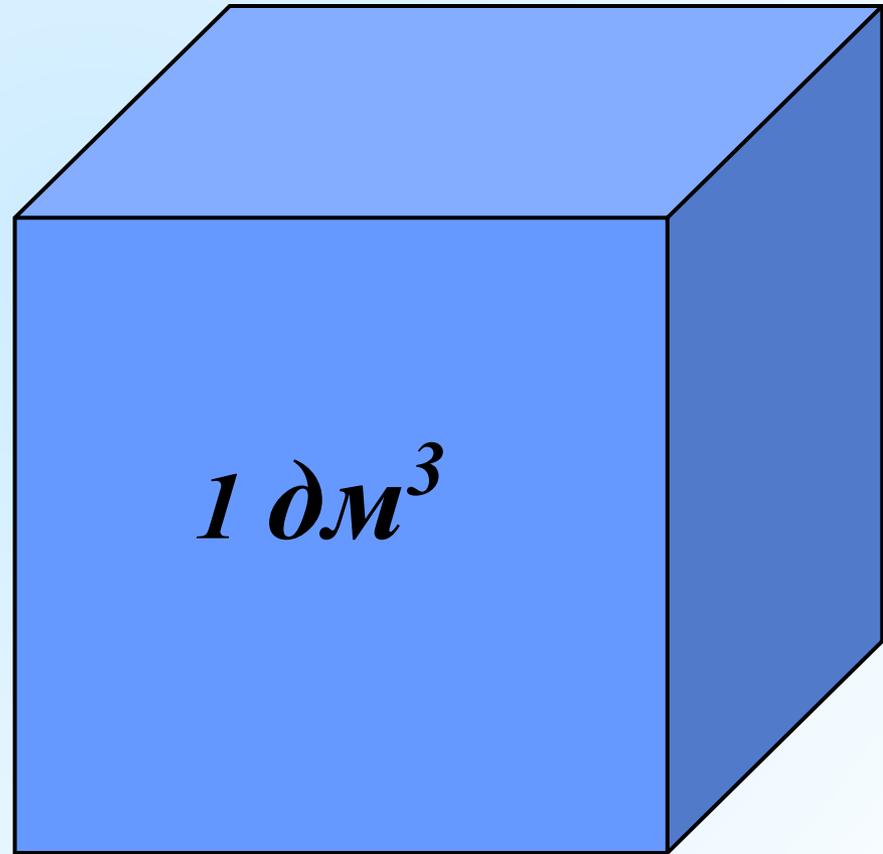
**Единица измерения
объёма – куб со стороной **1****

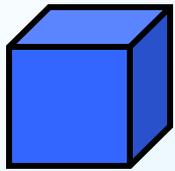
$$V = 1 \text{ ед}^3$$

— 1 см

 1 см^3

■ 1 мм^3





1 см³

Объём

1 слой :

$$4 \times 5 = 20 \text{ (см}^3\text{)}$$

2 слой?

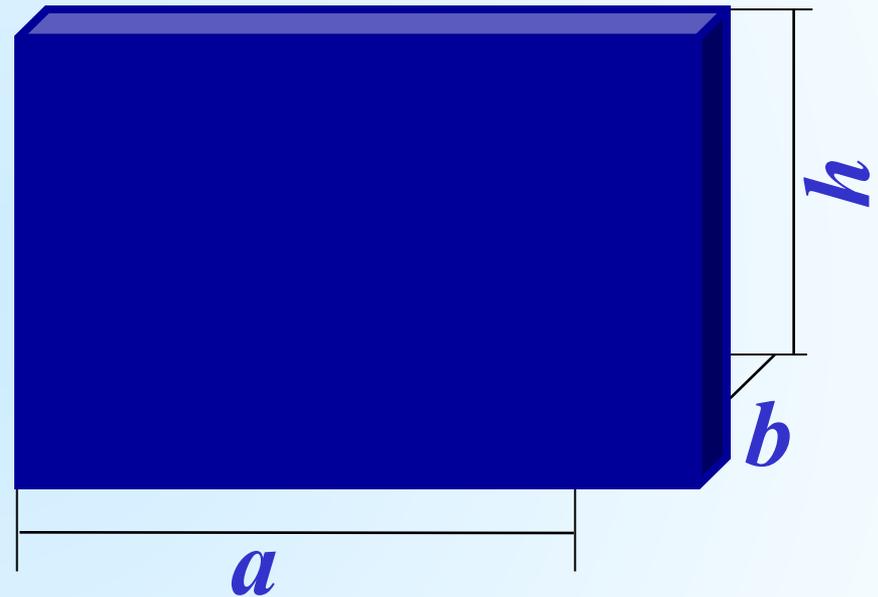
$$4 \times 5 = 20 \text{ (см}^3\text{)}$$

3 слой?

$$4 \times 5 = 20 \text{ (см}^3\text{)}$$

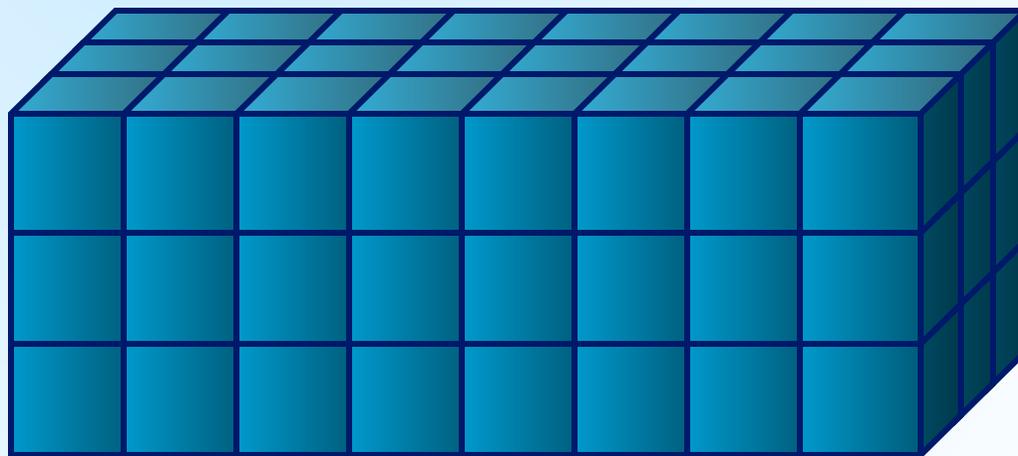
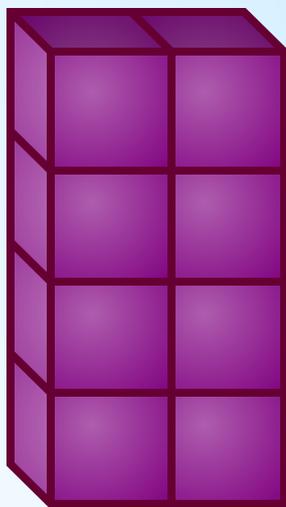
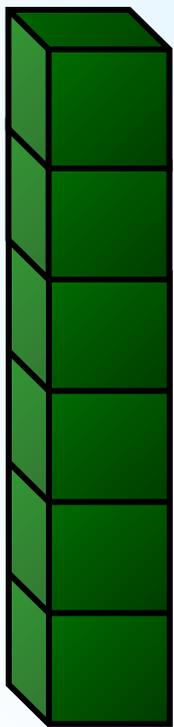
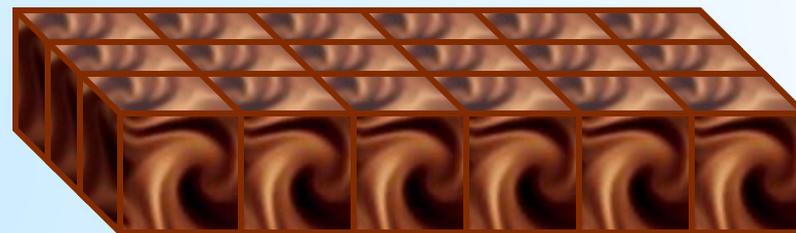
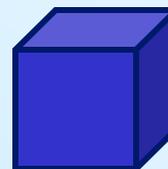
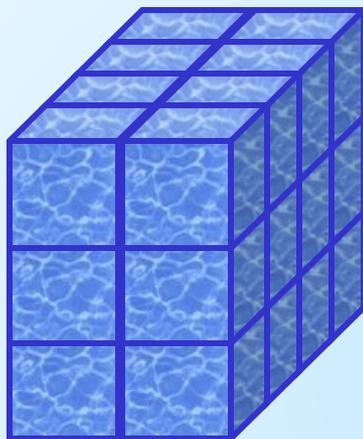
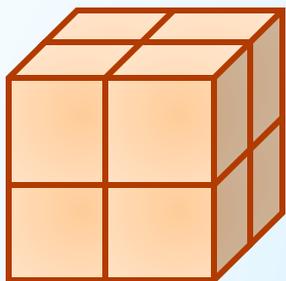
Всего:

$$4 \times 5 \times 3 = 60 \text{ (см}^3\text{)}$$

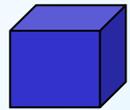


$$V = a \times b \times h$$

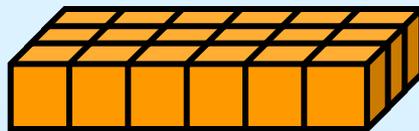
Найти объём фигур



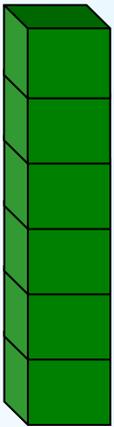
Проверь себя:



1) $V=1$



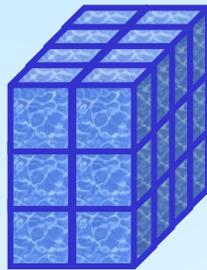
4) $V=18$



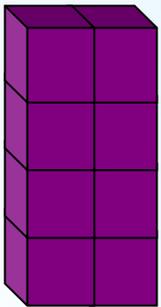
2) $V=6$



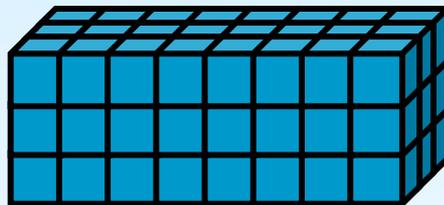
5) $V=8$



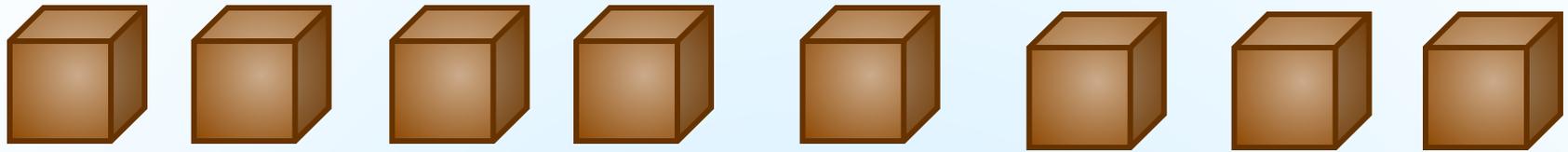
6) $V=24$



3) $V=8$

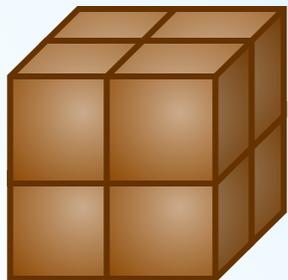


7) $V=72$

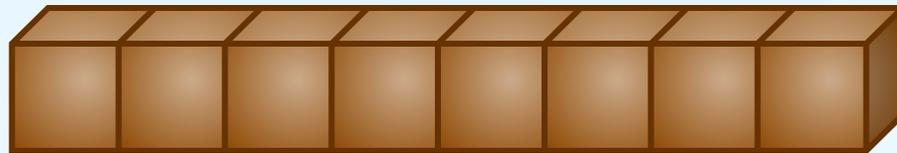


Из 8 одинаковых кубиков со стороной 1 см складывают прямоугольные параллелепипеды. Изобразите из кубиков все возможные варианты. Какой из параллелепипедов имеет наименьшую площадь?

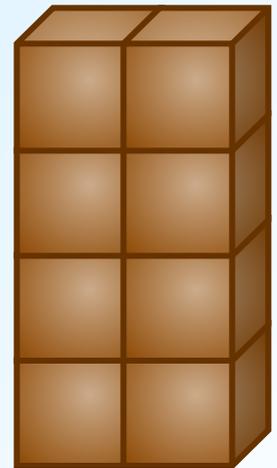
$$S=24 \text{ см}^2$$



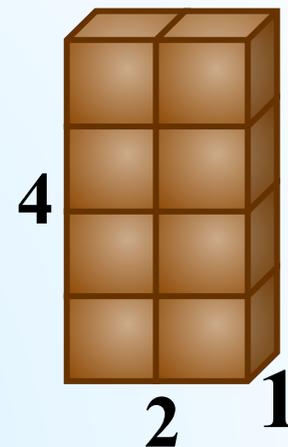
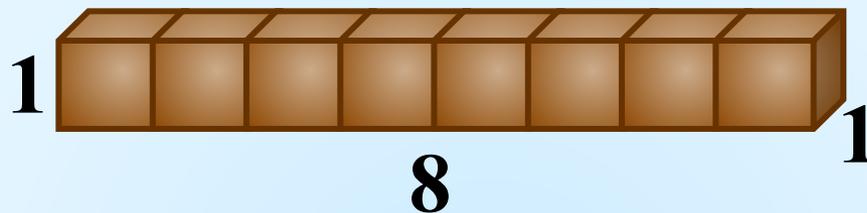
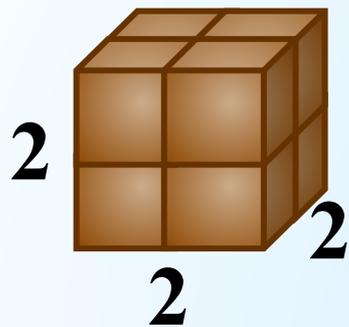
$$S=34 \text{ см}^2$$



$$S=24 \text{ см}^2$$



Проверь себя:



$$S = (2 \cdot 2) \cdot 6 = 24 \text{ см}^2$$

$$S = (8 \cdot 1) \cdot 4 + (1 \cdot 1) \cdot 2 = 34 \text{ см}^2$$

$$S = (2 \cdot 4) \cdot 2 + (1 \cdot 4) \cdot 2 + (2 \cdot 1) \cdot 2 = 28 \text{ см}^2$$

Найти объём прямоугольного параллелепипеда, если его измерения 6см, 3см, 4см.



$$V = a \times b \times h;$$

$$V = 6 \times 3 \times 4 = 72 \text{ (см}^3\text{)}$$

МОЛОДЦЫ!