



Улыбнись  
новому дню!





**«Знание – самое превосходное из владений. Все стремятся к нему, само же оно не приходит».**

*Ал-Бируни*

$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

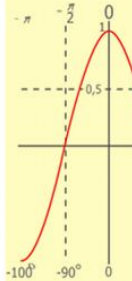
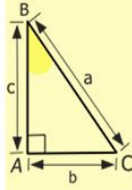
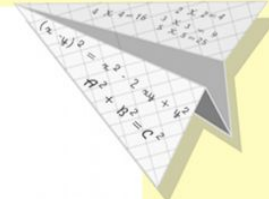
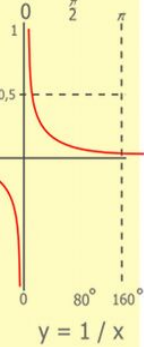
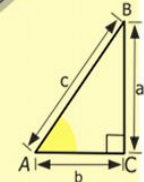
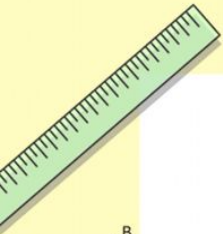
$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$

$$\sin 90^\circ = 1$$

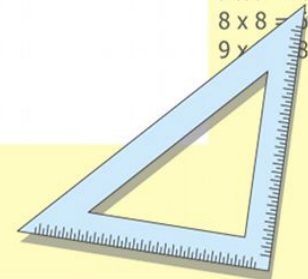
$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$



$$y = \cos$$

- 2 x 2 = 4
- 3 x 3 = 9
- 4 x 4 = 16
- 5 x 5 = 25
- 6 x 6 = 36
- 7 x 7 = 49
- 8 x 8 = 64
- 9 x 9 = 81



# УСТНЫЙ СЧЁТ

Замени числа суммой разрядных слагаемых

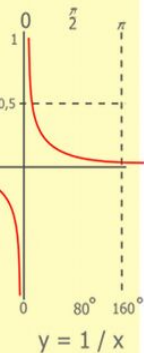
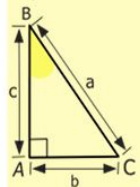
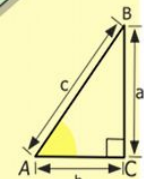
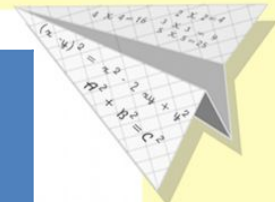
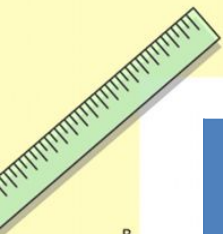
14 026

29 743

447 400

463

43 094



$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

- $2 \times 2 = 4$
- $3 \times 3 = 9$
- $4 \times 4 = 16$
- $5 \times 5 = 25$
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$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

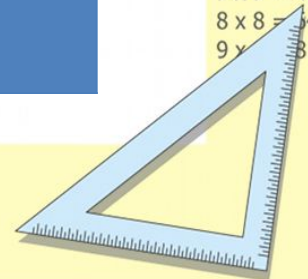
$$\sin 90^\circ = 1$$



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$





$$14\ 026 = 10\ 000 + 4\ 000 + 20 + 6$$


$$29\ 743 = 20\ 000 + 9\ 000 + 700 + 40 + 3$$


$$447\ 400 = 400\ 000 + 40\ 000 + 7\ 000 + 400$$

$$463 = 400 + 60 + 3$$


$$43\ 094 = 40\ 000 + 3\ 000 + 90 + 4$$


$$\frac{a}{A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

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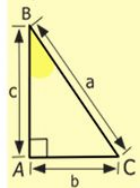
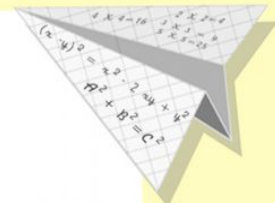
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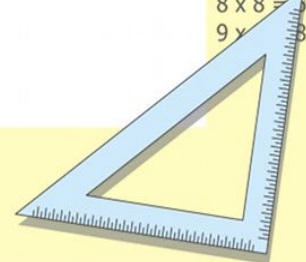
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$y = \cos$

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# УДАЧА

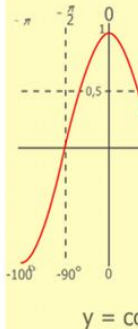
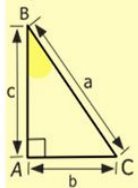
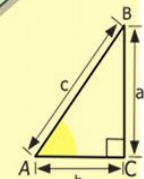
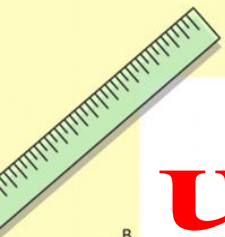
**Черногория** 14 026 км<sup>2</sup>

**Армения** 29 743 км<sup>2</sup>

**Узбекистан** 447 400 км<sup>2</sup>

**Андорра** 463 км<sup>2</sup>

**Дания** 43 094 км<sup>2</sup>



$$\begin{array}{r} 1\ 2\ 5\ 00 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105\ 000 \end{array}$$

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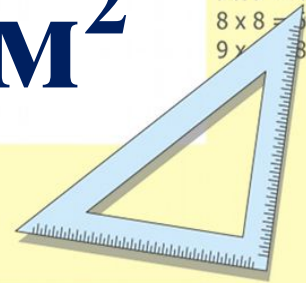


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$$(x+y)(x-y) = x^2 - y^2$$

$$x = 70$$



6 см

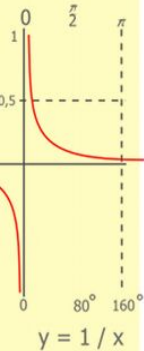
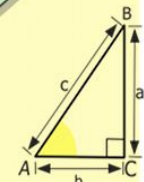
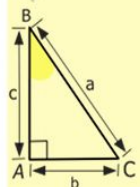
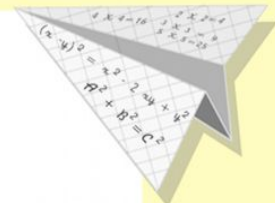
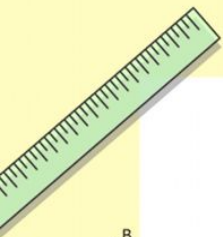


3 см

$$S = a \cdot b$$

$$S = 6 \cdot 3 = 18 \text{ см}^2$$

Ответ: площадь 18 см<sup>2</sup>



y = cos

$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

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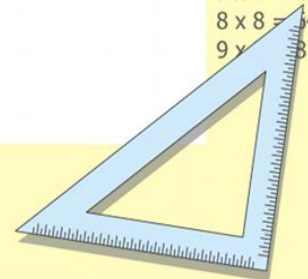
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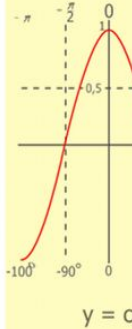
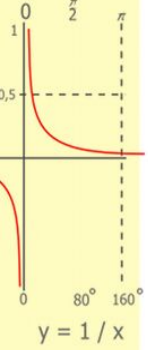
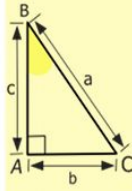
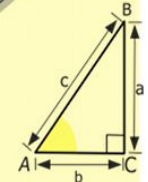
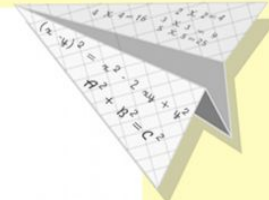
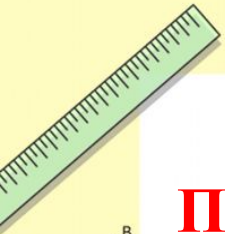
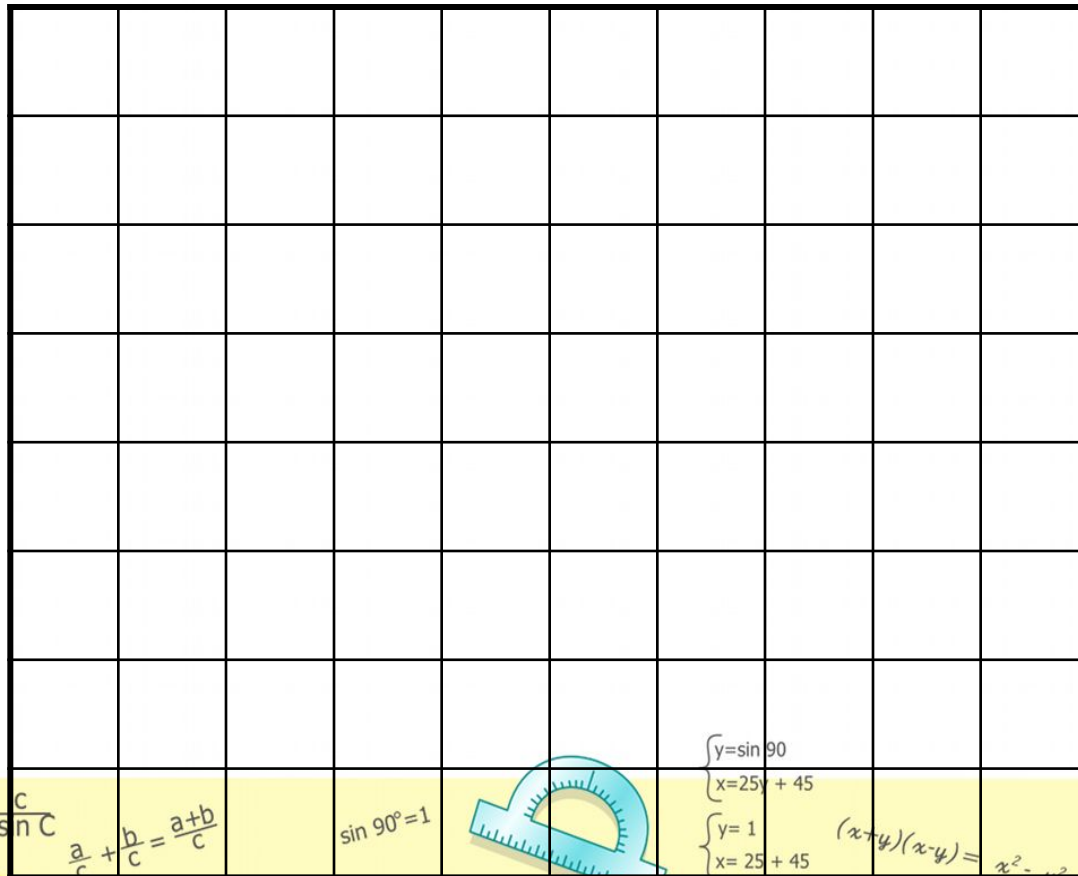
$$(x+y)(x-y) = x^2 - y^2$$



# Палетка

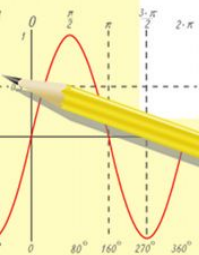
**Палетка** - это прозрачная плёнка, разделённая на равные квадраты.

(от франц. Паллет – «пластинка, планка»)



$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 2100 \\ + 840 \\ \hline 105000 \end{array}$$

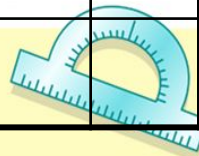
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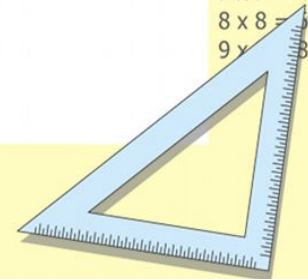


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$

$$x = 70$$



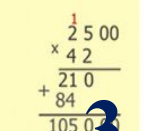
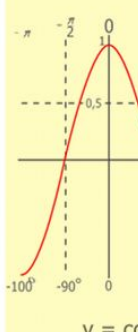
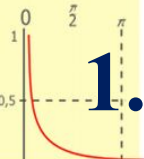
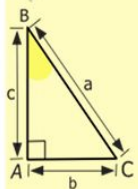
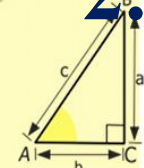
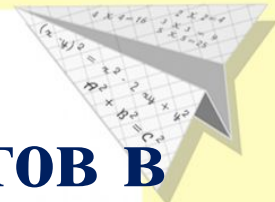
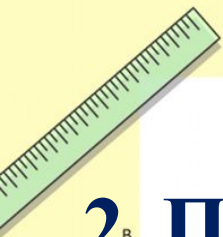
# Алгоритм вычисления площади с помощью палетки

2. Посчитай количество полных квадратов в фигуре.

1. Наложить палетку на фигуру.

4. Сложи число полных квадратов и число неполных квадратов, делённое на 2.

3. Посчитай количество неполных квадратов и раздели это число на 2.



- 2 x 2 = 4
- 3 x 3 = 9
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$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

$$\sin 90^\circ = 1$$

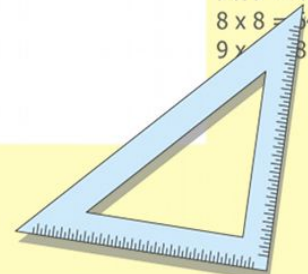


$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

$$\frac{x}{70}$$

$$(x+y)(x-y) = x^2 - y^2$$





# Формула вычисления площади с помощью палетки

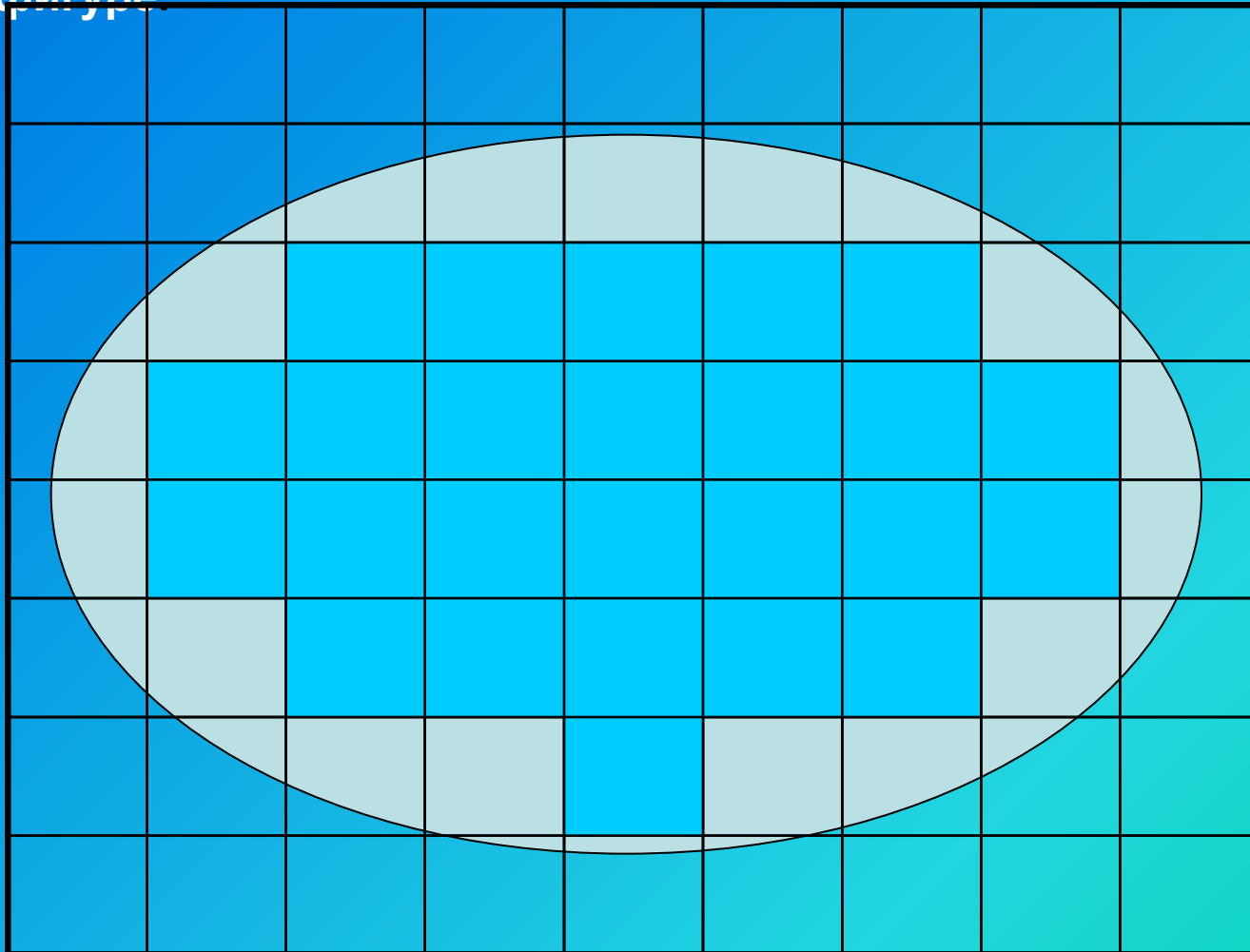
$$S \approx a + b : 2$$

**a** - целые клетки

**b** - частичные клетки

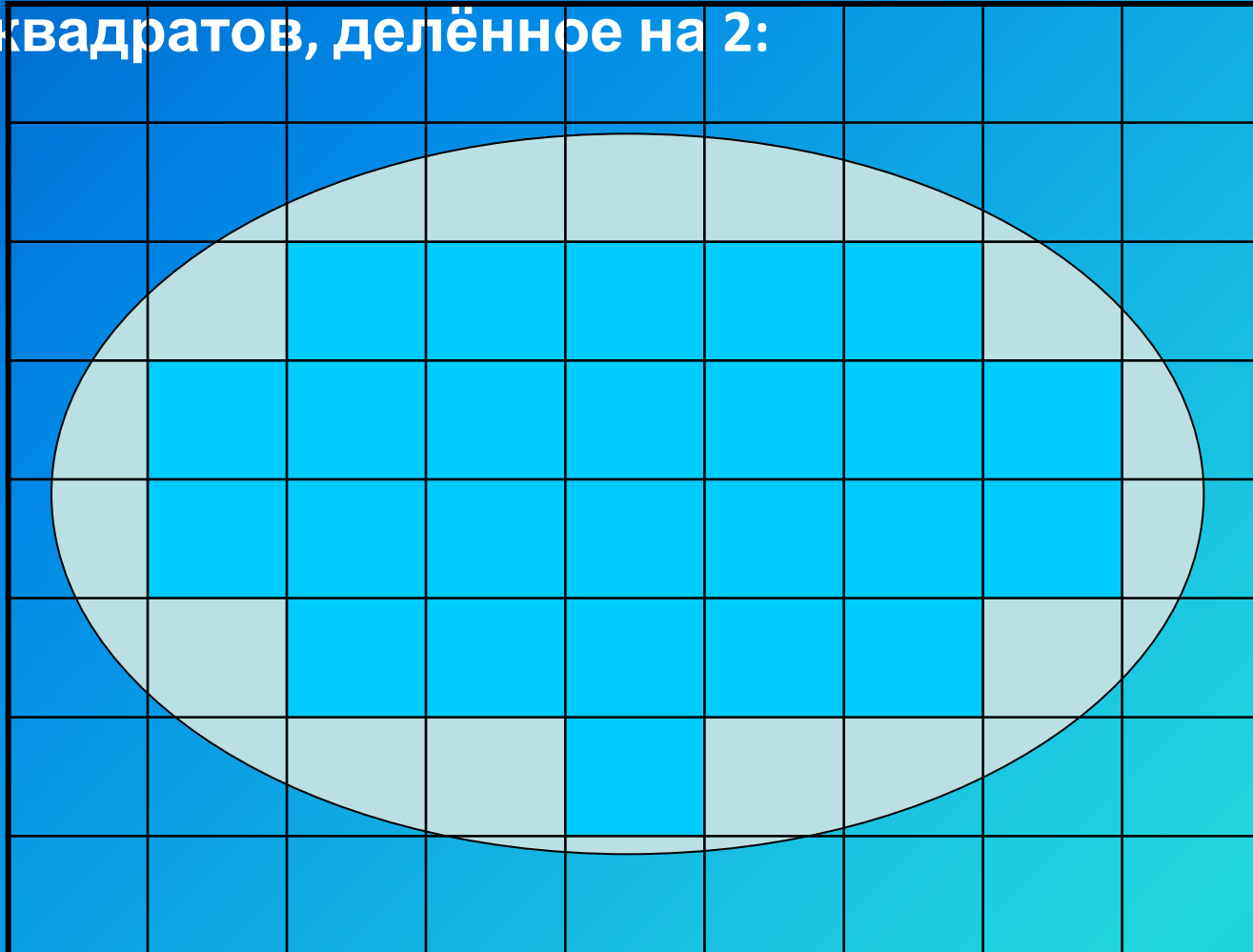
# Алгоритм вычисления площади

1. Наложить палетку **с помощью палетки**
2. Посчитать количество полных квадратов в фигуре



3.Посчитай количество неполных квадратов и раздели на : 2

4.Сложи количество полных квадратов и число неполных квадратов, делённое на 2:

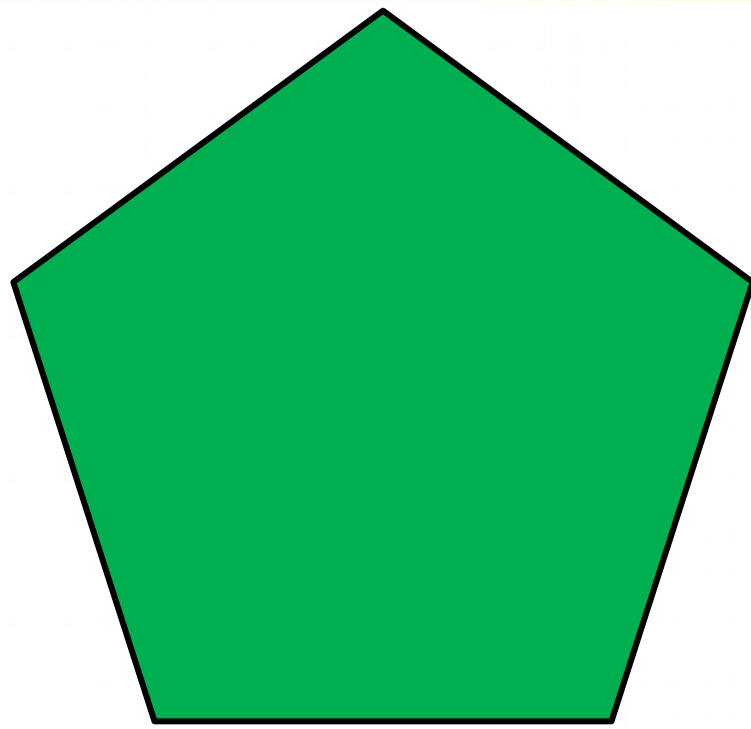
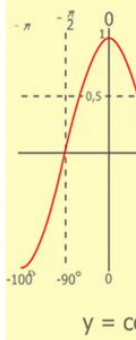
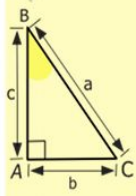
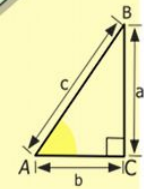
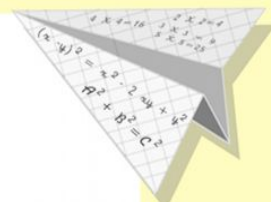
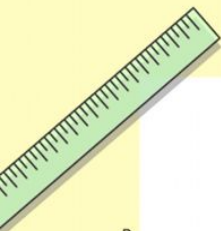


$$28:2=14(\text{кв})$$

$$25+14=39(\text{кв})$$

Ответ:  
площадь  
данной фигуры  
примерно 39  
см<sup>2</sup>

Ответ: площадь данной фигуры 39 см<sup>2</sup>



$$\begin{array}{r} \frac{1}{2} 500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$

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$$S \approx a + b : 2$$

$$S \approx 26 + 22 : 2 \approx 37 \text{ cm}^2$$

Ответ:  $S \approx 37 \text{ cm}^2$

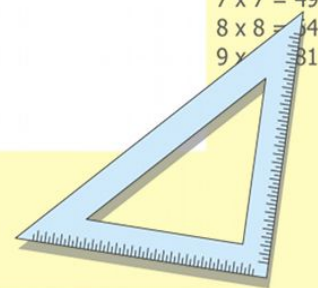
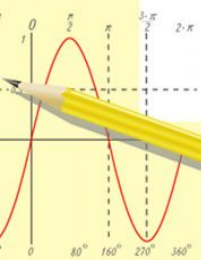
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$$\sin 90^\circ = 1$$

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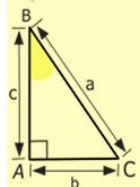
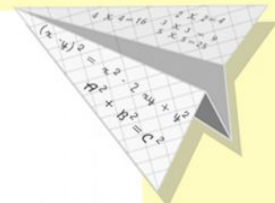
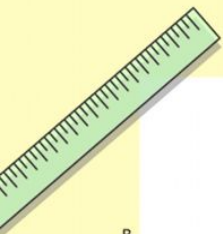
$$(x+y)(x-y) = x^2 - y^2$$



# Домашнее задание:

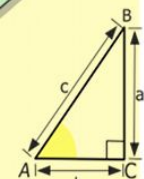
1) Учебник: знать правило и алгоритм использования палетки; № 191 (с. 43).

2) Найти площадь нестандартных фигур из домашнего обихода (по желанию).

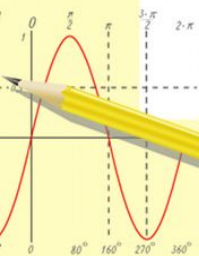


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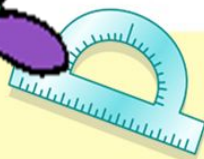
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$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

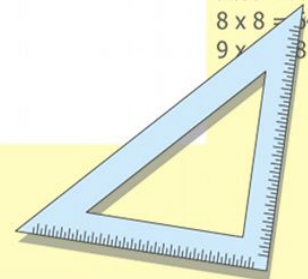
$\sin 90^\circ$



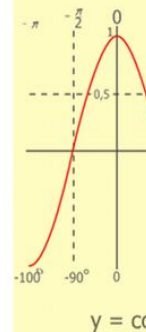
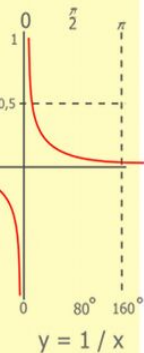
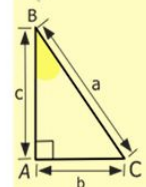
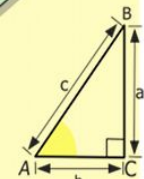
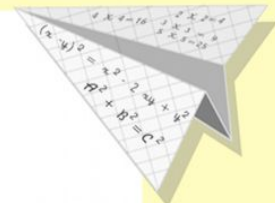
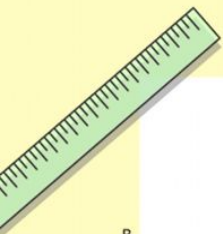
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$

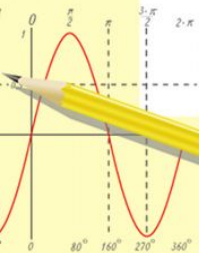


# Спасибо за работу!



$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$

- $2 \times 2 = 4$
- $3 \times 3 = 9$
- $4 \times 4 = 16$
- $5 \times 5 = 25$
- $6 \times 6 = 36$
- $7 \times 7 = 49$
- $8 \times 8 = 64$
- $9 \times 9 = 81$



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

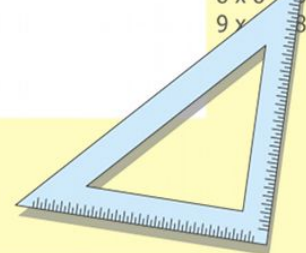
$$\sin 90^\circ = 1$$



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

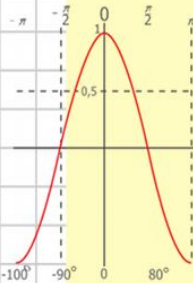
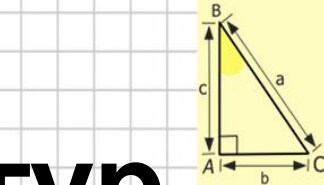
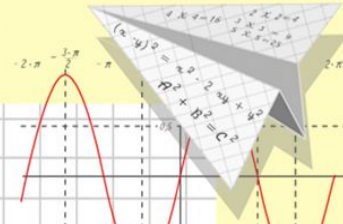
$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$$(x+y)(x-y) = x^2 - y^2$$



# Математик

а

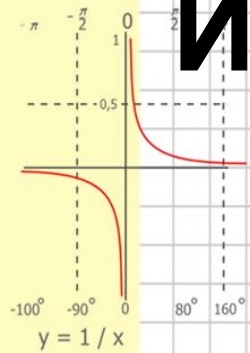
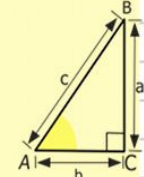
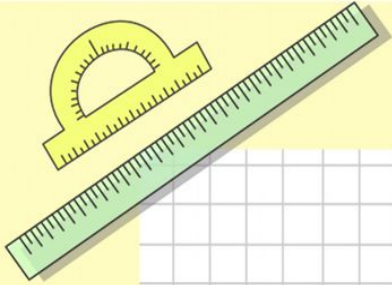
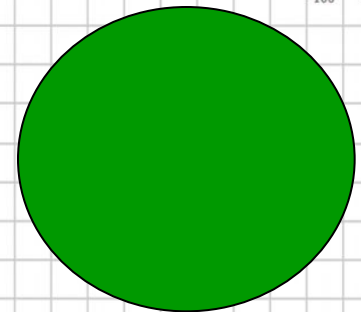
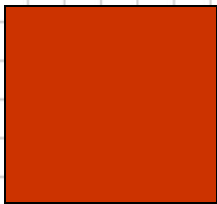
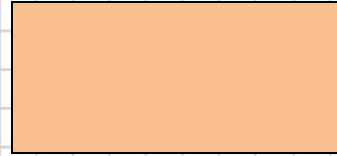
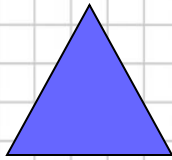


$y = \cos x$

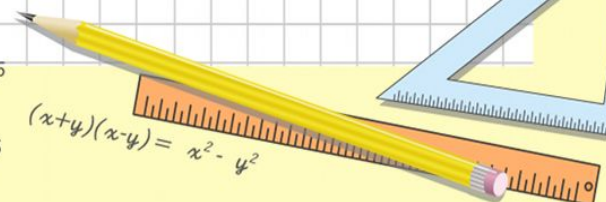
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- $5 \times 5 = 25$
- $6 \times 6 = 36$
- $7 \times 7 = 49$
- $8 \times 8 = 64$

# Измерение площади фигур с помощью палетки

## Урок- практикум



$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 2100 \\ + 8400 \\ \hline 105000 \end{array}$$



$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$

$\sin 90^\circ = 1$

$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

$$\begin{cases} y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$

$(x+y)(x-y) = x^2 - y^2$