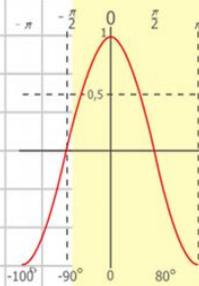
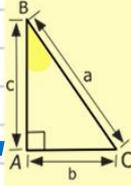
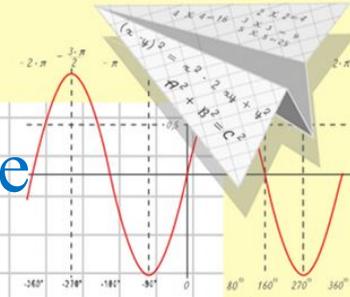
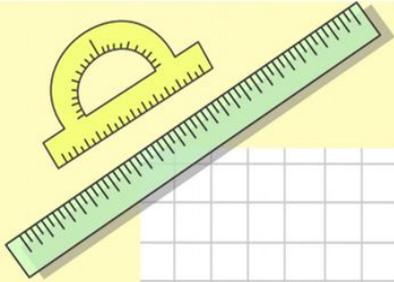


Математик

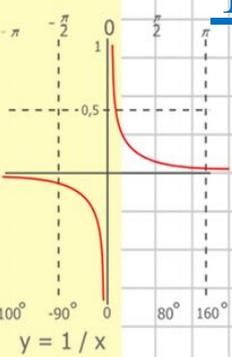
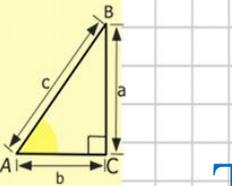
Практическая работа по математике 5 класс

Тема: «Измерение сторон, углов треугольника. Вычисление периметра треугольника»

Подготовила урок Мартынова В.В.
Учитель математики ГБОУ СОШ №319
2018г



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



$$\begin{array}{r} 1 \\ \times 2500 \\ \hline 2500 \\ + 84 \\ \hline 105000 \end{array}$$

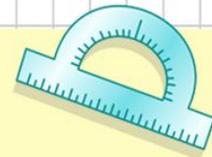


$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

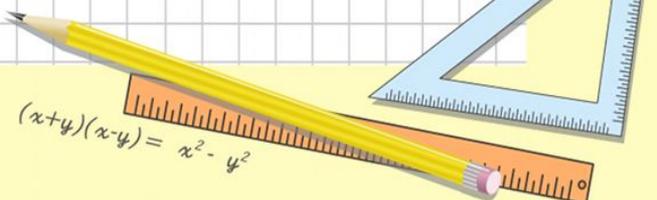
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$



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



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ x = 70 \end{cases}$$

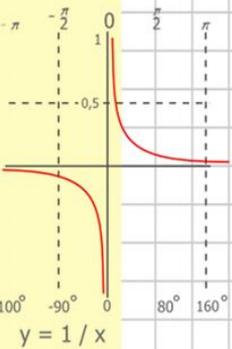
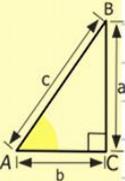


$$(x+y)(x-y) = x^2 - y^2$$

Математик

а

- Назовите треугольник
- Назовите вершины треугольника
- Назовите стороны треугольника
- Назовите углы треугольника



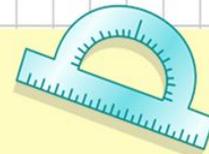
$$\begin{array}{r} 1 \\ \times 2500 \\ \hline 2500 \\ + 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$



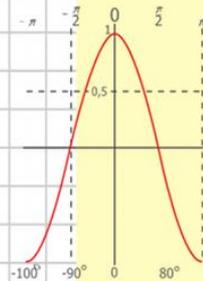
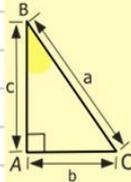
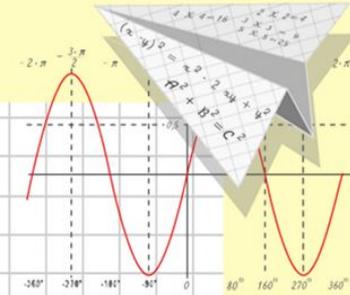
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$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$

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



$\triangle ABC$ -
треугольник
A, B, C-вершины
AB, AC, BC-
стороны
 $\sphericalangle A, \sphericalangle B, \sphericalangle C$ - углы



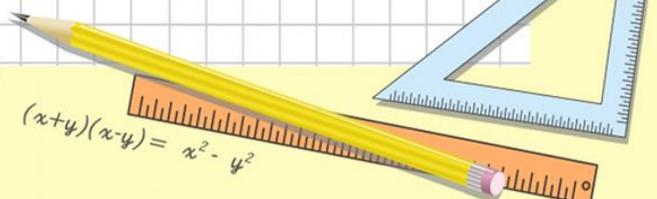
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$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

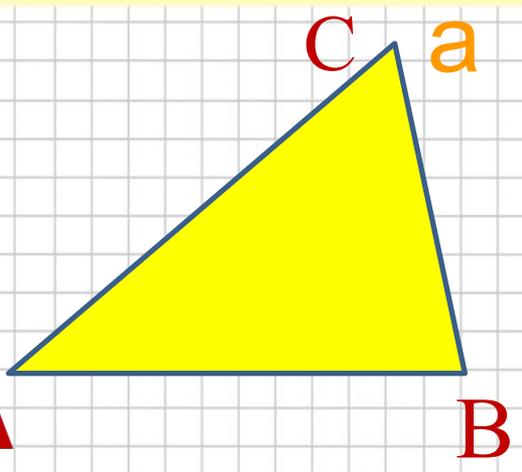
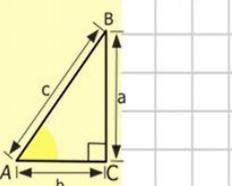
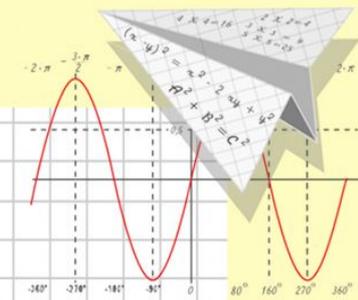
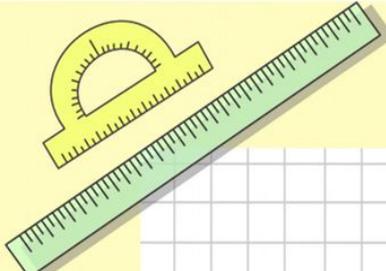
$$\begin{cases} y = 1 \\ x = 25 + 45 \end{cases}$$

$$x = 70$$



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

Математик



❖ Что можно делать со сторонами треугольника?

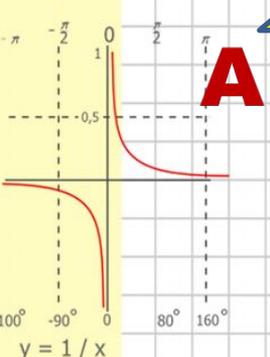
Измерять

❖ Какие единицы измерения длины вы знаете?

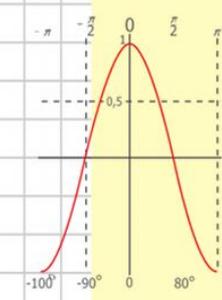
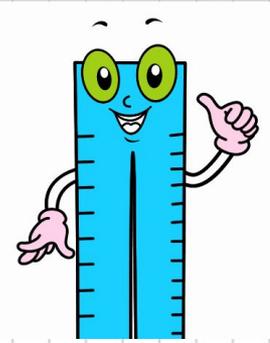
мм, см, дм, м и т.д

❖ Какой школьный инструмент поможет измерить длину стороны треугольника?

Линейка



$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$



$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \end{array}$$

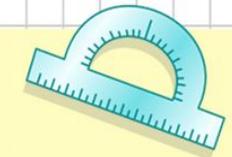


$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

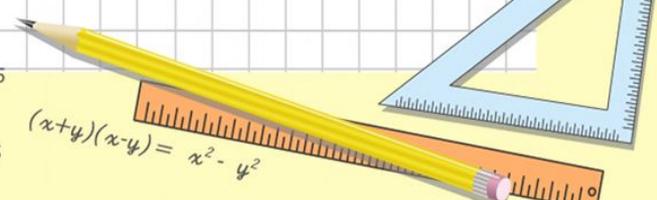
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$



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



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{cases}$$



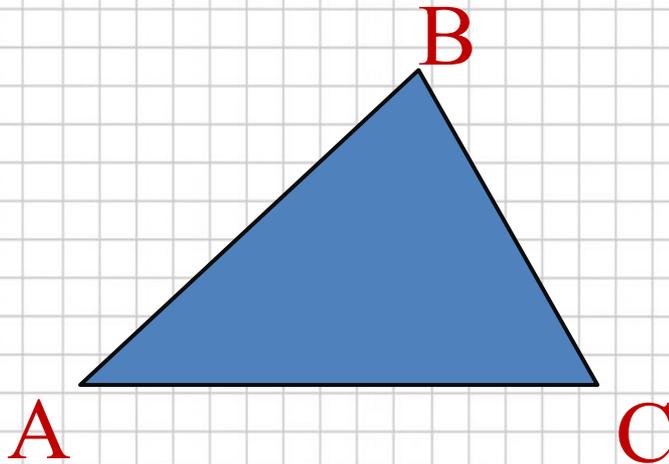
$$(x+y)(x-y) = x^2 - y^2$$

Математик

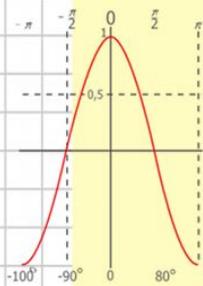
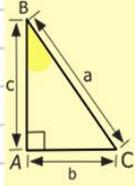
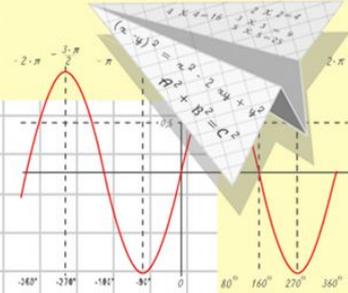
а

Задание:

- ✓ Назвать синий треугольник
- ✓ Измерить длины сторон синего треугольника
- ✓ Записать результат измерения

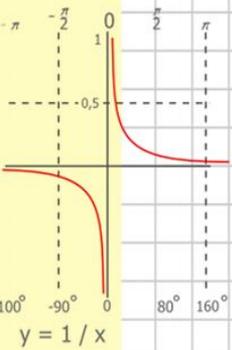
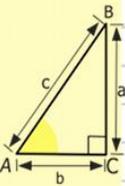


AB=7cm
AC=8cm
BC=6cm



y = cos x

- 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



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

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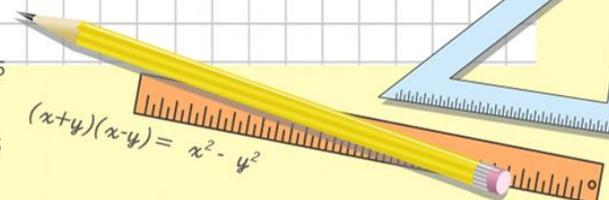
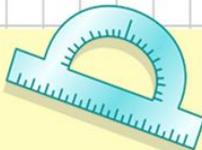
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$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$

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

$$x = 70$$

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

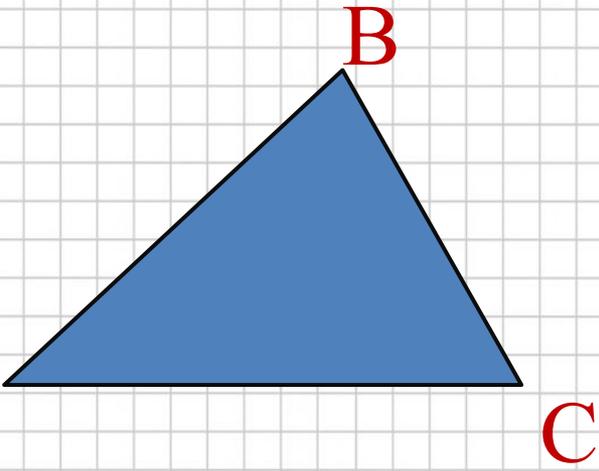
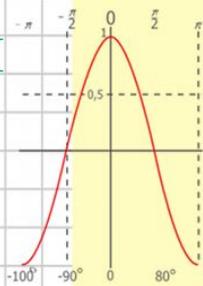
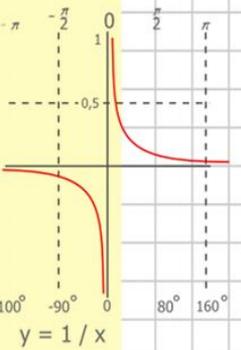
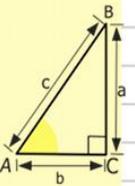
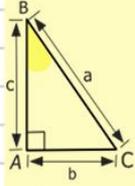
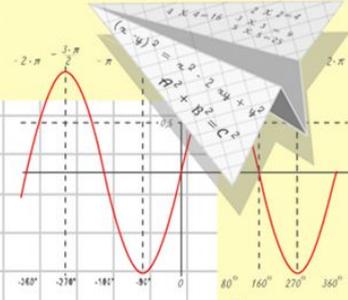


Математик

а

Задание:

- ✓ Чему равен периметр треугольника?
- ✓ Вычислить периметр данного треугольника.



$$P = AB + BC + AC$$

$$P = 7 + 6 + 8 = 21 \text{ см}$$

$$AB = 7 \text{ см}$$

$$AC = 8 \text{ см}$$

$$BC = 6 \text{ см}$$

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

$$y = \cos x$$

$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \end{array}$$



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

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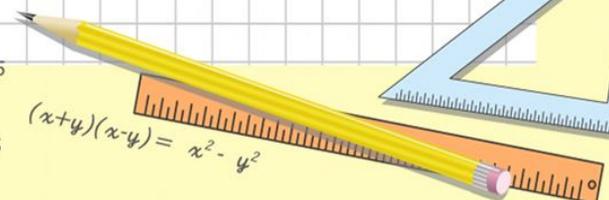
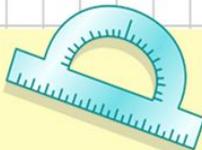
$$\sin 90^\circ = 1$$

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

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

$$x = 70$$

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



Математик

Гимнастика для глаз



1. Крепко зажмурились пару секунд.



2. Быстро моргаем минутку.



3. Смотрим вверх, вниз, вправо, влево 2 раза.



4. Вращаем по кругу туда и обратно.



5. Закроем глаза. Темнота 3 секунды.



6. Откроем глаза, начнём заниматься.

Kuzbaeva

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

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

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

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

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

Математик

а

❖ Что можно делать с углами треугольника?

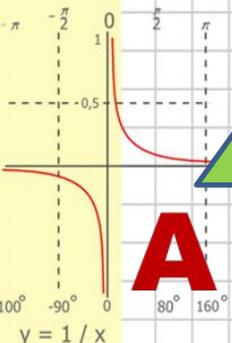
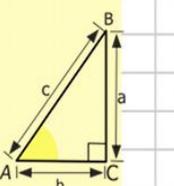
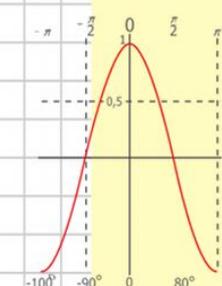
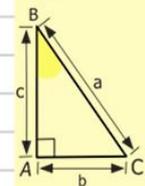
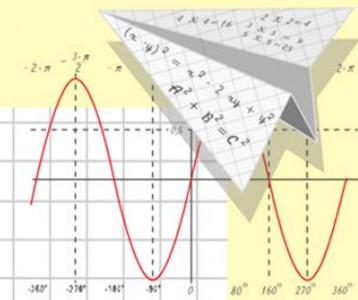
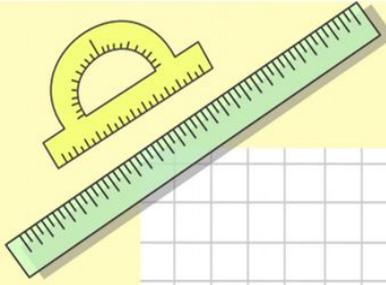
Измерять

❖ В каких единицах измеряются углы?

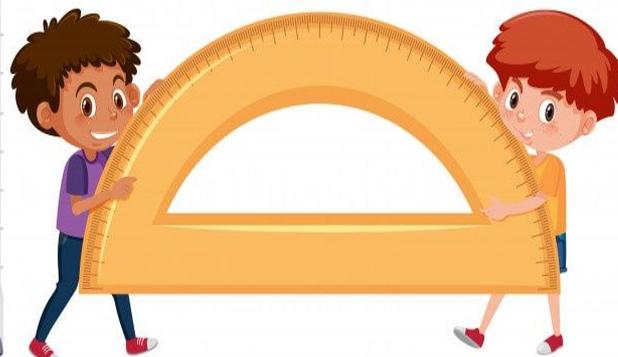
В градусах

❖ При помощи какого инструмента можно измерять углы?

Транспортира



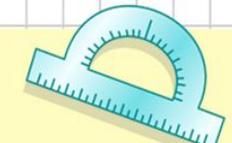
$$\begin{array}{r} 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$



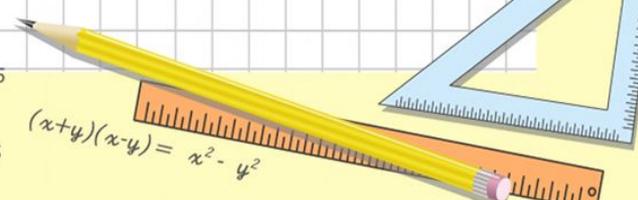
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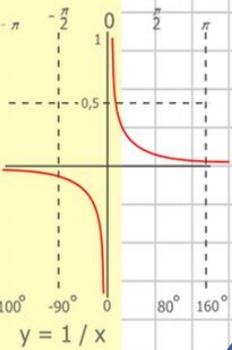
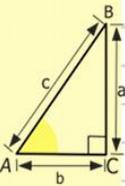
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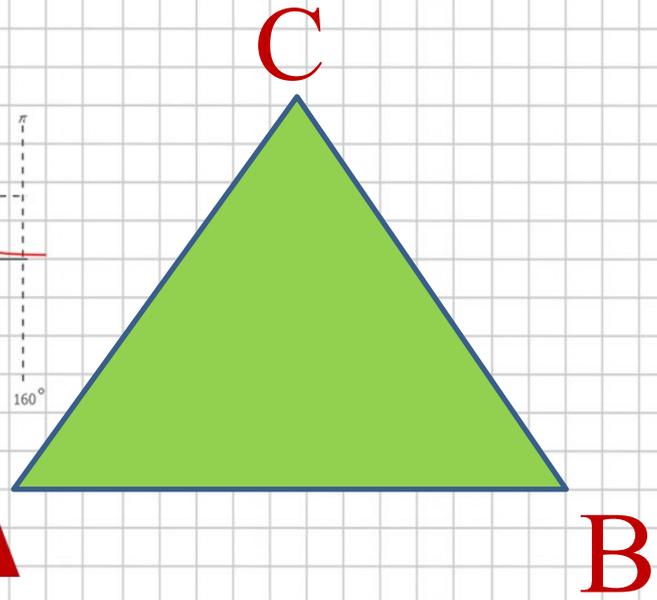
Математик

Задание: **a**

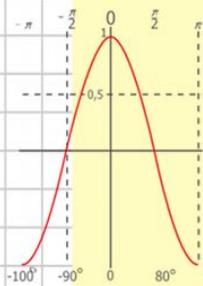
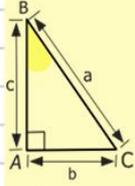
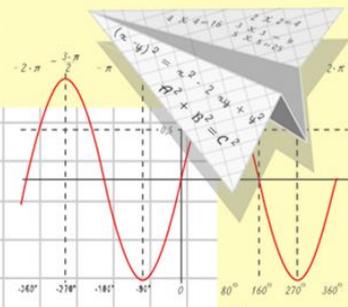
- ✓ Измерить углы зеленого треугольника
- ✓ Записать результат измерения



$$\begin{array}{r} 1 \\ \times 2500 \\ \hline 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 105000 \end{array}$$



$\sphericalangle A = 60^\circ,$
 $\sphericalangle B = 60^\circ,$
 $\sphericalangle C = 60^\circ.$



- $2 \times 2 = 4$
- $3 \times 3 = 9$
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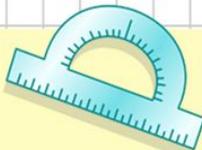


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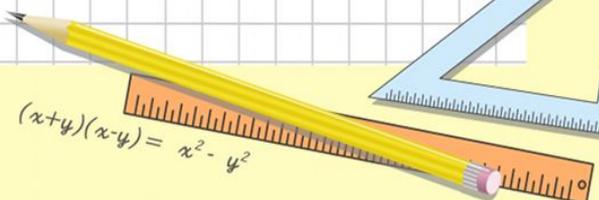
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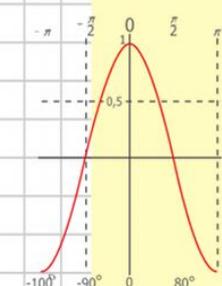
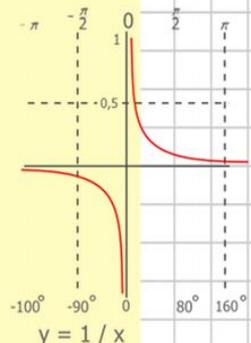
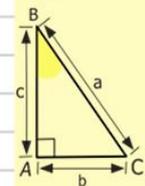
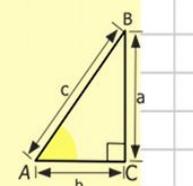
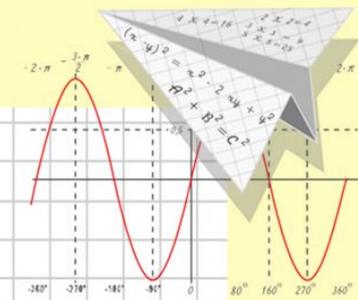
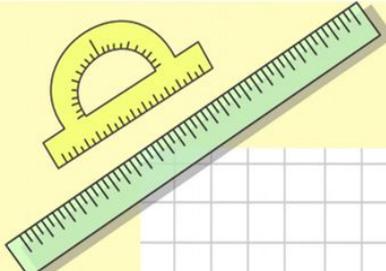
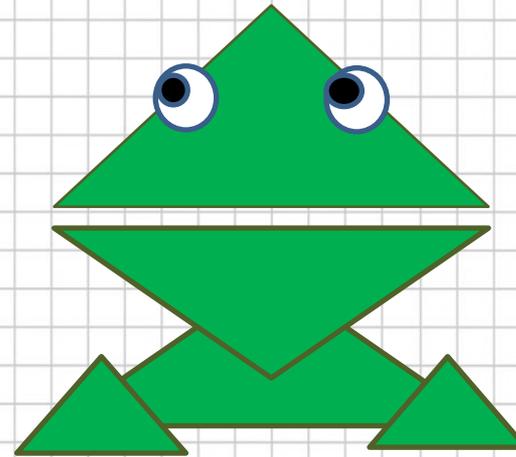
Математик

а

ТВОРЧЕСКОЕ ЗАДАНИЕ:

- придумать фигуру из данных треугольников
- выполнить аппликацию

Например:



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

$$\begin{array}{l} 2 \times 2 = 4 \\ 3 \times 3 = 9 \\ 4 \times 4 = 16 \\ 5 \times 5 = 25 \\ 6 \times 6 = 36 \\ 7 \times 7 = 49 \\ 8 \times 8 = 64 \end{array}$$

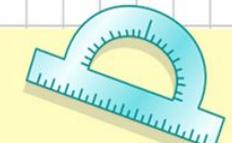


$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

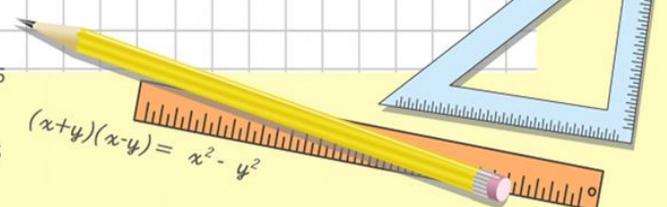
$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c}$$



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



$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \\ y = 1 \\ x = 25 + 45 \\ x = 70 \end{cases}$$



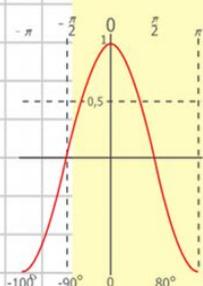
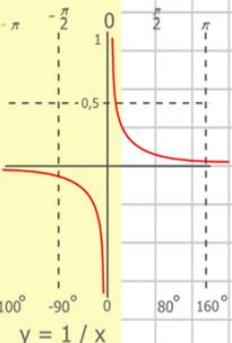
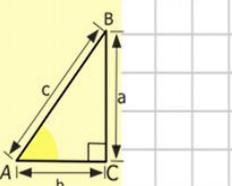
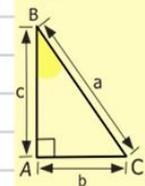
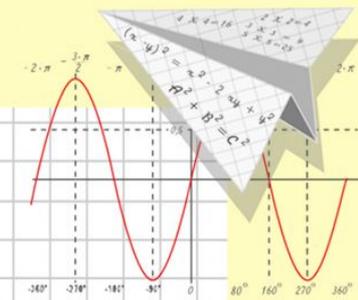
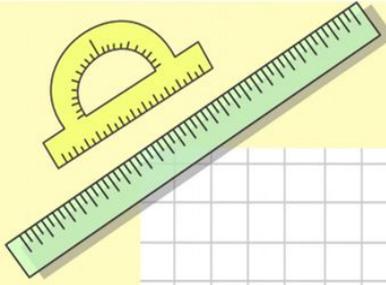
$$(x+y)(x-y) = x^2 - y^2$$

Математик

а

Рефлексия

- Изобразить на бланке с тестом смайлик, который соответствует настроению в конце урока
- Сдать тест на проверку.



$$\begin{array}{r} 1 \\ 2500 \\ \times 42 \\ \hline 210 \\ + 84 \\ \hline 10500 \end{array}$$

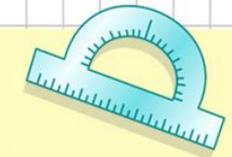
$$y = \cos x$$
$$2 \times 2 = 4$$
$$3 \times 3 = 9$$
$$4 \times 4 = 16$$
$$5 \times 5 = 25$$
$$6 \times 6 = 36$$
$$7 \times 7 = 49$$
$$8 \times 8 = 64$$



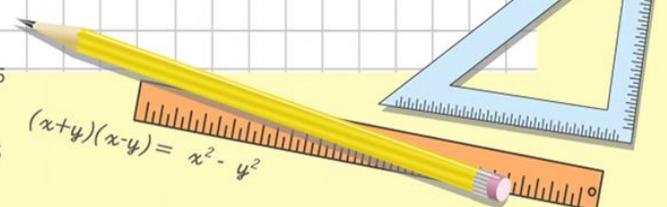
$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

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

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



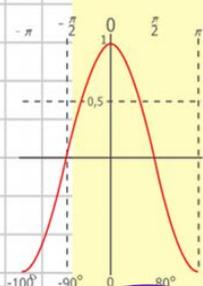
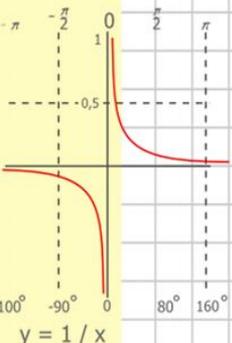
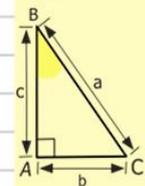
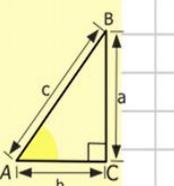
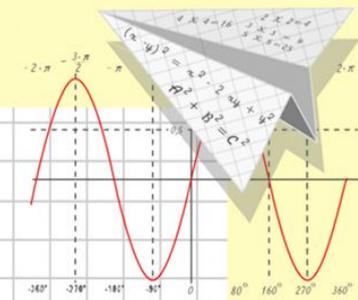
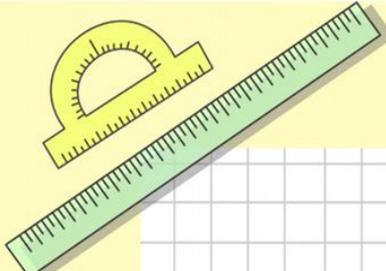
$$\begin{cases} y = \sin 90 \\ x = 25y + 45 \end{cases}$$
$$\begin{cases} y = 1 \\ x = 25 + 45 \\ x = 70 \end{cases}$$



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

Математик

а



СПАСИБО ЗА УРОК

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

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

ДО НОВЫХ ВСТРЕЧ



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

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



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



$$\begin{array}{l} y = \sin 90 \\ y = 25 + 45 \\ y = 1 \\ x = 25 + 45 \\ \hline x = 70 \end{array}$$

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

